An Address
on
MEDICINE: ITS PAST AND ITS FUTURE.

Delivered at St. Thomas's Hospital on the occasion of the Distribution of Prizes to the Students in the Medical School on Oct. 2nd, 1895,

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GENTLEMEN,—The first impulse of a very busy man when he has been asked to deliver an address is undoubtedly to excuse himself as politely as he can. That impulse may be described as automatic and instinctive. I have read how in 1837 Dr. Marshall Hall discovered the reflex function of the spinal cord; how that, when an impression is conveyed along a sensitive nerve to one of the posterior columns of that cord, the resulting stimulus may be "reflected" or turned back through an anterior column and along a motor nerve, and may call muscles into activity without the intervention of volition or consciousness. This seems to me very precisely to define the instantaneous and almost unconscious negative which would leap to the lips of an overworked man of letters on ordinary occasions when his nervous system became suddenly stimulated by the demand for a discourse about some subject outside his usual studies. But when the honour fell unexpectedly upon me of being invited to distribute prizes here to-day to the students of the Medical School of St. Thomas's Hospital I could not consider the occasion ordinary. The profound respect which I feel for your noble profession; my true delight in its progress and advancing achievements; the firm hope I entertain of greater medical and surgical developments to come which will by-and-bye render human life more pleasant and more prolonged, my many friendships among the leading physicians and surgeons of the day, my own private gratitude to the skill and goodness of some among them, and my personal interest in your great and useful foundation of St. Thomas's Hospital—these, with other considerations, suppressed in me that "reflex" and automatic "No" which the shyness of the scholar's study and the dread of apparent presumption on his part must otherwise have enjoined. I felt that it would prove a real and memorable pleasure to me, as well as a singular honour, to speak as a man of books, philosophy, and politics to those who will be the surgeons and physicians of the coming century, if only that I might discharge my individual debt to their order, and might ever so imperfectly prove to them with how much warm sympathy their labours and successes are followed in the sphere of literature and journalism. It is thus and therefore, gentlemen, that I stand before you to-day.

The next step was to learn something as to the extent of the patience with which you are accustomed to permit outsiders to talk to you upon topics whereon the best of them can only possess an "intelligent ignorance." By the kindness of your chief officials I received several elucidatory documents on the matter, and among them an extremely interesting copy of the address delivered in this same place last year by my learned and witty antecessor, Dr. Merry, Rector of Lincoln College. After reading that admirable composition, which said so many things that I would have liked to say to-day, only more brilliantly, my emotions were very much the same as those of Michael Angelo when he was riding out of the gates of Florence with a written commission to construct the Basilica of St. Peter's at Rome. They say that he turned round upon the saddle of his mule and, gazing at the stately and beautiful Duomo rising into the Italian sky behind him, ejaculated mournfully, "Come te non voglio, meglio di te non posso" ("I will not build like you, yet better than you I can never build"). So I say of the reverend rector, who, being public orator for the University of Oxford, playfully regretted that he was not allowed to discourse to you in Latin. I fear it would only seem plagiarism if I also should sigh for permission to speak my mind on this high occasion in a poem or a leading article! He has further anticipated most of the neat classical things I might and would have cited about medicine out of Homer, Plato, and the ancients. He has recounted more than one of my own favourite stories about medical men, while in all he uttered upon the dignity of your calling, its duties, its difficulties, its moral and social exigencies, I should need to borrow from him his gravity, authority, and eminent academical standing to tread with safety in the footsteps of that most excellent lecturer of 1894.

Yet I will not yield to Dr. Merry or to anyone else in admiration of the magnificent record of medicine and surgery in England, or in heartfelt honour for those who have given their lives, and are here and elsewhere preparing to give them, to the pursuit of this, in my judgment, the best, the gentlest, the loftiest, and the purest of the secular crafts which men follow. You, gentlemen, begin by self-devotion and fearless defiance of risks which others dread and shun. Your original choice is brave, your early ambition honest, your first steps hard, your daily work, even if ever so little elevated by enthusiasm and faith, is work that brings help and hope to your fellows and constitutes you the common friends of all. And the really educated medical man who knows himself the accepted servant of science and nature, and the messenger, as far as can be, of Heaven's eternal pity, has moments, we all believe, of rich success and boundless recognition that make his fees the very smallest part of his after-payment in life.

Moreover, you are advancing, like true victors in a march of constantly augmenting conquests, over that strange fascinating waste of twilight and wondering exploration which is called "science." There have been times when it was not particularly honourable to be a medical man. The specimens of medical and surgical practitioners whom we find held up to ridicule in the pages of Molière or in the pictures of Hogarth deserved, as far as can be judged, the pillory of immortal scorn in which their ignorance and pretentiousness have been placed by the genius of satire. Yet there were not wanting, even in times of Thomas Diafoirus, serious and modest searchers after the secrets of healing—men imbued with the dignity and solemnity of their calling; and, indeed, I think we could fill up every single age, from Galen and Avicenna to Ambroise Paré and John Hunter, with the names of truly great practitioners. But your lot, gentlemen, is cast in an epoch of such acceleration of knowledge, such expansion of methods and resources, such ever-increasing power of doing solid good to your kind, that the old satires have all died away. The new age frankly honours and values your vocation, in discharging which you yourselves move forward by rules more and more exact and less empirical. Before an audience so specially intelligent as this it would be presumption for a non-professional man to speak with an air of information about the advance of your science. Nevertheless, a partial interest may attach to what someone from your outer world of patients thinks of your inner world and work as medical men. Living men of sixty years or so belong historically to the present happy reign, and within that reign we can recognise, though lacking your closer observation, what prodigious progress has been accomplished by medicine and surgery, and, I may add, in the science of sanitation. It was one of the surgeons of St. Thomas's Hospital, the illustrious John Simon, F.R.S., who may be said, in conjunction with Mr. Edwin Chadwick, to have actually invented public hygiene. These great benefactors and their able assistants had none of the knowledge which you all, in greater or less degree, now possess about bacilli and bacteria; but by improved drainage, purer water-supply, good paving and scavenging, removal of refuse, and prevention of overcrowding they succeeded in establishing such a difference between clean and unclean places that the way was paved for the fruitful discoveries which followed. Dr. Buchanan, inspecting for the Privy Council eight years after the new decencies began, found death-rates reduced by percentages ranging from 16 to 32. Dr. Snow in 1849 from the well in Golden-square, Dr. Budd in 1857 from typical typhoid fever cases, and Mr. Netten Radcliffe by the light of a limited outbreak at Theydon Bois, helped in establishing the truth that zymotic diseases have their special seeds and grow after their kind, which the experiments of Pasteur, Tyndall, and others came fully to confirm. Hence we outsiders have seen with wonder and with hope the present epoch spring up of the germ, the preventive inoculation, the serum injections and what not of rich research and promise. Nor can even persons only partially informed think of M. Pasteur's superb triumphs over anthrax, splenic fever, the silkworm disease, and perhaps we may add hydrophobia, without their minds passing to the quick genius with which Lister applied the generalisation of these facts to surgical lesions and, under his new system of antiseptic, vastly diminished the anxiety of the operator and the perils of his patient. In this connexion I mention before you for honour the name of

my late illustrious friend, Professor Tyndall, since no one outside your own profession wrought more successfully or brilliantly to show the difference between airs and liquids, natural and sterilised. This delicate conflict against our infinitesimal enemies has been carried on with supreme ability by Klein and Koch and many another well-known living benefactor, although there is now I observe a kind of reaction in favour of some of these microscopic beings, since some seem friendly. "The most important fact," said Sir J. Russell Reynolds in his discourse this year before the British Medical Association, "with regard to recent microbiological research is the gradually increasing appreciation of the fact that these lower forms of life exert, not necessarily mischievous, but, indeed, benignant influences on the human body, and that although the mode of their operation is not fully explained they take part in healthy processes, assisting normal functions, nay, indeed, it would seem sometimes producing them and warding off the malign effects of other influences to which we are habitually exposed."

We know already that a man's well-being may depend almost as much upon his leucocytes as upon his domestic relations, or the state of his digestion, or the balance at his banker's. The antitoxin treatment of diphtheria, which was, on the whole, favourably reported on at the recent meeting of the British Medical Association, is another example of the novel and hopeful enterprises which are being pushed into the region of these micro-organisms. Yet it was only at the beginning of this reign that Schwann connected fermentation with the activity of the yeast cell, and not until 1860 that the Academy of Science gave its prize to M. Pasteur for the brilliant essay which swept away all lingering theories of spontaneous generation. And now you have at ever-extending command this vast new region of bacteriology, wherein sunshine and daylight and the wonderful natural forces of life and those that are friendly amongst the microbes fight on the side of your enlarging science and on our behalf against the "pestilence that slayeth in secret." A great authority has declared that "a day will come when in London, in Berlin, in Paris, man will not die of diphtheria, of typhoid, of scarlet fever, of cholera, or of tuberculosis, any more than he dies in these cities to-day of the venom of snakes, or of the tooth of wolves." Perhaps even our invisible enemies contend amid themselves. I noticed with interest a remark of Sir William Broadbent at the meeting of the British Association, when he said: "One virus may be antagonistic to another; an attack of small-pox has often seemed to cure phthisis."

In connexion, moreover, with that promising subject of the antitoxins, such as those for diphtheria and tetanus, there is some promise, be it observed, of injections which will neutralise snake poison. Professor Calmette in France and Professor Fraser of Edinburgh, after patient experiment with snake venom, have apparently succeeded in rendering rabbits, and eventually horses, proof against doses of this 350 times stronger than an ordinarily lethal quantity. The details of the matter are most interesting, but too elaborate for statement here.

The amount of "antivenine" required to immunise a horse is considerable, and it took Professor Fraser some time before he could collect sufficient material to begin on. Having done so, however, he selected a healthy horse and injected it for over four months, by which time it was immune against any amount of venom. The serum obtained from it was then tried and found to be highly satisfactory. It can be desiccated and packed for transmission abroad in a form which will keep. One must have lived in India, where the recorded annual mortality from snake-bites is over 22,000, to appreciate the vast hopefulness of such a remedy against the deadly cobra and murderous krait. What would not be the gratitude and wonder of the Indian peasants if this antivenine should prove a success?

Has anybody given thought in the same connexion to what might be done to rescue the draught cattle and horses of South Africa from the tsetse fly? Whole belts of our growing empire there are cut off from trade by the poison of this tiny plague, which kills all horses, oxen, and donkeys that it stings, yet has no power whatever upon the zebras, buffaloes, and wild beasts of the Veldt. If the blood-serum of these naturally acclimatised and adapted creatures of the same genera, properly applied, could give immunity to South African caravans, millions of money might be saved to the colony.

It would be very presumptuous of me to speak, except from my point of view of a more or less intelligent ignorance, about your refinements in the use of the stethoscope and auscultation; your largely improved surgical and medical armoury; your specula, laryngoscopes, and hypodermic syringes; the tabloids and other highly convenient forms of modern medicines, exquisite appliances of the benign art unknown until later times. Possibly modern surgeons are even a little ahead of physicians in the exciting race, for while we see that the French medical officers cannot prevent the malarial plasmodium from prostrating half the Madagascar expeditionary force, I have read with admiration in a recent discourse of your distinguished chief, Sir William MacCormac, by way of illustration of the increasing effort of modern surgery to provide antiseptic protection in an effective form, that "during our last war in Egypt the organisation was so complete in this respect that not a single case of infective wound disease occurred during the whole campaign." Then, too, we outsiders have heard with wonder how you are coming to use animal extracts in medicine and how you think to reinforce failing human organs with the active principles derived from similar animal organs, as in the case of Dr. Ord's practice and Dr. Lauder Brunton's thyroid tablets. If this can be done for myxœdema the jungle fables seem half justified which prescribe lion's flesh to render men brave and the eyes of lynxes to make them keen-sighted. It tends to explain a recipe which I once saw in an old black-letter book styled "Alexis hys Secrets." The prescription was for the prevention or cure of burns and scalds, and it commenced by the ordinance, "Tayke, and powder as small as ye may, a salamander."

But I need not dwell further upon these widening powers and expanding prospects of your noble profession when you can read in the eloquent address with which Sir J. Russell Reynolds opened the recent meeting of the British Medical Association the declaration and the comment which I shall take leave to cite. He began by observing that the great surgeon Sir William Fergusson, who presided over the last London meeting in 1873, might have paused, with all his dauntless courage, to perform an operation which either of his dressers of twenty years ago could be announced to do to-day, and would do without fear or dread, and that Edmund Alexander Parkes, who then delivered the Address in Medicine, would, if he could return to his old haunts, be entirely bewildered and amazed if he found his house physician feeding a patient on sweetbreads or injecting thyroid extract for the cure of myxœdema. And the President of the College went on to observe upon the far greater interest and earnestness which characterise the student of to-day as compared with his predecessor. "Much of this," as he said, "was due to the indulgence of a larger hope. Hidden as still are the great mysteries of life, there yet emerge certain definite facts to be grasped by the mind, to be seen and handled, not only imagined or asserted; and the place of these facts in the economy of Nature, their bearing upon others, and their relation to work yet to follow give a precision and confidence to study that is, comparatively speaking, of modern growth. There was plenty of assertion and show of knowledge in the past; but even the teachers did not believe the half of what they taught, nor comprehend the half of their sage pronouncings. Nature has, as it were, taken man more into her confidence and daily reveals so much, even while concealing more, that the learner stands firmly on the ground he has gained, instead of trembling on a quagmire the length, and breadth, and depth of which he could not see and did not dare much to imagine or investigate. He felt sure of little then but of his own and his teacher's ignorance, but now he grasps much that is ascertained truth and such as can be seen, shown, measured, and recorded with perfect accuracy."

But let me take permission to tell you that what fill my own heart most with thankfulness and cause me chiefly to congratulate you on these new days of therapeutic science are the benign, the blessed discovery and the now almost universal employment of anæsthetics. If you look into the history of that happy revolution you will be warned against depreciating fresh ideas by noticing how sadly slow men are to take the hints which Nature gives to them of her very choicest treasures of resource. *Why* did not anyone act upon what Sir Humphrey Davy had so long before learned and imparted about the properties of nitrous oxide? The key was already there, but not until many years afterwards did an almost casual hand (that of an American dentist) fit it

into the golden door behind which sate waiting an Angel of pity kinder and more powerful than any Arabian fairy suddenly revealed in her divine beauty and bountifulness to any prince or magician of the "Thousand and One Nights." Is there anything in human history which more sternly teaches that man must win every boon of Nature by his own ceaseless striving than that this simple chemical and physiological secret of chloroform should have lurked so strangely long in its easy formula, undeciphered, through all those waiting generations when pain was an omnipresent tyrant whom science could not control, and the operating room a torture chamber dreaded almost as much by the surgeon as by the sufferer? Think of those gallant sailors of Nelson at Trafalgar, whose bleeding stumps, in the gloom of the orlop deck, were plunged into hot pitch to stay the hæmorrhage. One would almost expect that, for pity of such brave men and for the sake of the countless tender women and children who, age after age, so hopelessly endured, Telesphorus, the God of Healing, or Nature herself, would have burst their iron law of impassive silence, and, as Helen did in the "Odyssey" for the sorely tried Greeks, have poured this nepenthe into the bitter cup of mortal life. I can remember the poetess Eliza Cook, whom as a boy I knew, when chloroform was still unknown, writing how—

> "Lips that blench not in the reeling strife
> Turn silent and white from the surgeon's knife."

Not until 1847, although Davy had been so near the revelation in 1839, did the anæsthetic age commence, giving to your art a sure control of anguish; to its boldest practice confidence, quiet, and leisure; and to those who have to lie under that knife a sweet and complete oblivion. I have myself known what it is to pass, fearless of the kind steel, into that world of black velvet tranquility of which your magic drugs now keep the gate, and to awake as good as healed, grateful beyond words for the soft spell of enchanted peace and the sure and faithful skill. You will all agree, I am confident, with an extract which I have taken from the excellent paper upon "Medicine and Surgery" contributed to a work called the "Reign of Victoria" by Mr. Robert Brudenell Carter. He writes: "The use of anæsthetics has changed the whole aspect of surgery. Prior to 1847 operations were few in number and almost limited to the amputation of limbs, the removal of cancerous and other tumours, the resection of a few of the larger joints, cutting for stone, and the ligature of main arteries for aneurysm. The pain suffered by patients was so horrible as to tax severely the endurance of the bravest and strongest, and to depress seriously, and ofttimes beyond recall, the powers of life. Death from 'shock' was by no means uncommon, the patient sinking in a few hours from the actual suffering which he had undergone. The writer well remembers, as a medical student, turning sick and faint at the agonies which he was called upon to witness; and it was a point of honour in those days with operators to abbreviate such agonies as much as possible and to cultivate mere speed in operating, as the highest and most valuable form of dexterity. Nothing was attempted which could not be done quickly, and an amputation in the hands of a practised surgeon was forced to assume almost the appearance of a feat of legerdemain. For the separation of the lower limb above the knee—of course, not including dressing—twenty seconds have been known to suffice, while forty seconds was regarded as a period of time which no one was justified in exceeding. When anæsthetics were employed it came to surgeons as a kind of revelation that they need no longer be in a hurry.

Thus in 1847 Simpson and his coadjutors put into your hands a chain to bind at will the demon of pain, and in 1865 Lister at the Glasgow Infirmary by his antiseptic method inaugurated your grand conquest of pyæmia and septicæmia, and that ancient standing terror of the "hospital gangrene."

I will not venture to pass from such broad and common grounds of congratulation to speak before my present audience of the detailed triumphs of latter-day surgery; what you have lately learned in this your "Palace of pain" from the splendid successes of your chiefs, and will afterwards beneficently and boldly practise in regard to ovarian tumours, eye and throat diseases, and the rest. Moreover, while ordinary conquerors must reckon the dimensions of their victories by the numbers of the slaughtered, your glorious campaign computes the magnitude of its triumph by lives saved or prolonged, by pains and injuries abolished, and by the uses and pleasures of human existence restored. One of the high authorities already quoted has furnished a calculation of the salvage of life effected even during the early years of the present reign by the commencing improvements in preventive and curative medicine. In the five years from 1838 to 1842 London, with an average population of 1,840,865 persons, had an average annual mortality of 2557 in every 100,000. In the five years from 1880 to 1884 the average metropolitan population was 3,894,261, and the average annual death-rate 2101 in each 100,000. A calculation will show that these figures represent a saving or prolonging of lives during that lustrum to the number of 96,640. The mean annual death-rate has now been reduced to a point lower than shown in these. It was 22·16 per 1000 for England and Wales at the commencement of the reign, and it is to-day better than 19·0 per 1000, while in Her Majesty's army and navy the diminution of mortality apart from deaths from warfare has proved even more remarkable, and in India, where we used to lose 69 per 1000 yearly, this has been reduced to 16 per 1000.

I have met in this great hospital gentle and graceful presences which lead me to allude to one more great and happy change among many that has come upon your profession—I mean the education and employment of professional female nurses. A great physician once said in my hearing "that the three most sovereign medicines he knew were hot water, fresh air, and good nursing." In your fathers' day, gentlemen, we had no good nursing; we had Mrs. Gamp and Mrs. Betsy Prig, or else heavy-handed and heavy-footed male attendants, very different in mind and manner and influence from the lightly moving and softly speaking woman whose carefulness—intelligent, pitiful, but tranquil, trained, and governed—now smooths every sick-pillow and carries out faithfully and fearlessly the ordinances of the doctor. I do not know whether you, the surgeons and physicians, or we, your patients in *posse* or *esse*, are most to be felicitated upon this admirable revolution in the hospital ward and the sick-room. There is no doubt that it was primarily due to the example of that most compassionate and noble-hearted woman, Florence Nightingale, who went, at the head of a band of nurses, many of good birth, to the Crimean War, and by demonstrating there and afterwards the immense advantages of skilled and high-class nursing gave to her age the blessing of this modern system, and to her sex a new, a suitable, and a most honourable vocation. You have greeted the name of Miss Nightingale with instant and hearty applause. That generous tribute to her, who in her old age and retirement is even now the centre of so much silent national affection, encourages me to remember that I am, after all, poet by nature and lecturer only by accident, and that in those dark hours of the Crimean War I wrote certain verses, which are perhaps brief enough to be on this occasion acceptable. If I am so bold as to recall them from their unprinted oblivion it is because what they express of admiration and gratitude is applicable in a great degree to every good and dutiful nurse, here and elsewhere, who loyally discharges this new and most womanly function.

[The lecturer then recited the subjoined lines:]

> "If on this verse of mine
> Those eyes shall ever shine
> Whereto sore-wounded men have looked for life,
> Think not that, for a rhyme,
> Nor yet to suit the time,
> I name thy name, best victress in the strife;
> But let it serve to say
> That when we kneel to pray
> Prayers rise for thee thine ear can never know,
> And that thy gentle deed
> For Heaven and for our need
> Is in all hearts as deep as love can go.
>
> "'Tis good that thy name springs
> From two of earth's fair things—
> A stately city and a sweet-voiced bird.
> 'Tis well that in all homes
> Where thy kind story comes,
> And brave eyes fill, that pleasant sounds be heard.
> Oh, voice! in night of fear,
> Like night's bird's—sweet to hear;
> Oh, strong heart! set like city on a hill:
> Ah, watcher! worn and pale,
> Dear Florence Nightingale,
> We give thee thanks for thy good work and will.
> England is glad of thee;
> Christ, for thy charity,
> Take thee to joy when heart and hand are still."

This topic tempts me to glance at another closely connected with it, which has always had my earnest interest and support—I mean the movement so excellently instituted and so successfully carried out by my most noble friend the Marchioness of Dufferin and Ava for the supply of English

female doctors to India. In that country, by reason of its peculiar institutions, we are secure from any controversial questions as to the fitness of women for your profession. The customs of the *purdah* absolutely forbid the high-caste Indian ladies to avail themselves of male European skill. I was dining once in Jeypore at the table of Surgeon-Major Hendley, the able and trusted friend of the Maharajah, when a message came that the chief queen had been taken ill, and begged the advice of the British hakeem. He went, and, on returning, told us that although for seventeen years a familiar visitor of the palace, and the private adviser in many matters of the Rajpoot Prince, he had been obliged to suffer his head to be enveloped in a silken bag, and so equipped had been led into the zenana, where he had felt the pulse of her Highness and had examined her with the stethoscope, without seeing an atom more of his patient than a glimpse of one jewelled slipper through the strings of the bag. Here is a medical and surgical field, therefore, wide and unfilled, which might absorb any amount of feminine ability and devotion—if only proper public support be given—and I ardently entreat your countenance and assistance for it in the course of that professional influence to which I well know many among you are destined to rise.

I shall also take courage, since your kind attentiveness proves you convinced of the sincerity of my interest in your profession, to touch upon yet another topic, bristling, I know, with dangers for outside observers. I have read, in one of the able disquisitions already quoted, a paragraph dwelling upon Harvey's grand discovery of the circulation of the blood, where, after mentioning that that splendid revelation was the result of experiments performed upon living animals, the talented writer—a great living practitioner—goes on to say: "The whole fabric of modern medicine, the whole difference between the prospects of a sick man to-day and his prospects 200 years ago, rests absolutely upon vivisection." I shall not venture, in presence of knowledge and experience so much vaster and riper than mine can be upon such a matter, to dispute or qualify that assertion; nor shall I as an individual take on myself to deny to conscientious science, as many persons deny whose motives and arguments I most deeply respect, the right claimed to pursue essential experiments at the cost of the pain and death of innocent creatures. If to give my own life under torture would certainly lead to the saving of very many other lives, I should hate and scorn myself if I had not the will so to die; and as between men and beasts I suppose it is true that we are "more than many sparrows." But my private feeling, founded upon an ever-growing sympathy for the lower animals, an ever-increasing wonder at their gifts and capacities, and an ever-deepening sense of our human responsibility to them, was expressed in a phrase which I know was extravagant, used by me to a famous contemporary surgeon who said: "What, Sir Edwin, may I not vivisect a cat to save the life of a bishop?" And I replied: "Yes, Sir Henry, on condition that you afterwards give the cat a public funeral in Westminster Abbey as a benefactor to the Church and to humanity." Of course that was paradox, but I am persuaded that all of you wil understand me, and many will agree with me, when I declare that this solemn right to succour pain by inflicting pain has its best foundation upon an immense reluctance to adopt such a necessity, an anxious economy of anguish in the act; in fine, a feeling not of the heedless experimentalist but of the priest sacrificing victims for propitiation. I say again that I disclaim any pretention to teach mercy to you whose vocation has mercy for its watchword. I will not share with my age the fruit of patient physiological researches and then hastily reproach those who have laboriously acquired them for the general good. But as regards my own sentiments, that which chiefly led me to write "The Light of Asia" was the boundless and beautiful tenderness of the Buddhist religion towards the lower animals, whose lives are so mysteriously related to our own, whose lot is so largely at our disposal, and who are to us much as we human beings are to that invisible Almighty Power at the feet of which we have sometimes little cause to wonder when we ask in vain for pity and clemency. Therefore I will be bold enough to-day to put in this humble plea for the dumb martyrs of vivisection, that they may be as few as possible, as mercifully dealt with as possible, and that it be held by the inner *religio medici* which every true doctor cannot but possess and profess, that the meanest living thing so sentenced to suffer and to perish for mankind derives from its very doom a certain enhanced regard and a special consideration to which the conscience and honour of him who is a gentleman as well as a doctor will never be insensible.

But I am not here, as I before remarked, to inculcate reverence for all forms of existence and tenderness towards all suffering upon those whose glorious vocation it is to be merciful, sympathetic, and conscientious. Very quickly must the chivalrous aspect of a good doctor's life lay hold of him, as is sufficiently shown by a memorial which I have observed in your chapel. A tablet there records how your fellow-student in this medical school gave up his young life in the desire to save that of some obscure and humble patient. To my thinking no cathedral, no Chapel of St. George at Windsor or of Henry VII. at Westminster, no shrine or temple or sanctuary anywhere, can contain an epitaph more touching to peruse, more nobly commemorative of the dead, more splendidly honourable to the institution which trained him, and to-day trains, I doubt not, many like him. We have all of us lately read, too, of the heroism displayed by Surgeon-Captain Whitchurch in the fighting at Chitral on the Indian frontier, heroism justly rewarded by Her Majesty, and such as casts a lustre upon the whole profession. Well, gentlemen, having your walls enriched with such an example, and so many similar proofs existing of the chivalry of the profession, it is not possible, I think, that your studies and experiences should lead you permanently to the materialistic view of life. You know, or will know, far too much to believe that science can ever know all. While the wonderful advances which have been made in locating brain disease, and analysing and controlling the functions of muscle, organ, and nerve, appear to recommend now and again the easy theory that life, like heat, is only a "mode of motion," the perpetual mystery will still rebuke it of that bridge, never to be traversed by anatomist or metaphysician, whereby molecular movement and intellectual consciousness cross and recross in correlations. You will find yourselves admiring, emulating by your disdain of danger in face of duty, the illogical but magnificent transcendental philosophy of those your comrades, whose secret souls knew the immense wisdom of that verse, "He that seeketh to save his life shall lose it; and he who loseth his life, for my sake and the gospel's—the same shall save it." What gospel, gentlemen? Why, surely that which we have called, and may rightfully call, the *religio medici*; the good tidings to humanity of a science which, itself moving in the midst of constant personal peril, yet treats every human life as unspeakably precious; which succours and sustains all alike; which asks as little as the air we breathe, or the water we drink, whether we suffer by our own faults or otherwise, but always dispassionately pities and always impartially assists; which, all too grudgingly recognised by those who distribute the honours and emoluments of the State, and poorly recompensed, I fear, for the most part with the goods of this world, has generosities undreamed of towards the poor, maintains a professional honour rarely, if ever, stained, and shares with the faithful minister of religion and the honest lawyer the utter and ultimate confidences of those who have recourse to it. It is clear that the members of such a profession must in their farthest and deepest thinking be of the secret view that the diphtheritic bacillus or the foeman's bullet can do no final and far-reaching hurt to the real life of a good man. "If worms and maggots end us," wrote my old friend Walt Whitman, "then alarum, for we are betrayed." We are not betrayed! Nature—which seems to waste so many existences—like you, really disregards and neglects none; like you, she encourages and helps, by the instinct of self-preservation, every single life to live itself out unto the utmost, for reasons which we can partly divine when we see Sir Isaac Newton born a puny seven months' child, and Nelson's heroic spirit lodged in a feeble and diminutive body. I salute you, therefore, gentlemen of St. Thomas's Medical School, as the young reserves of that army whose victories are the triumphs of all mankind and whose enemies are all men's enemies. I know—I have paternal reason to know—that the labours of your educational preparation grow harder and harder and that a good doctor must nowadays be chemist, physiologist, botanist, mechanician, and many things besides. But be sure your credit augments with your pains and your acquirements, and deign to receive to-day in this address—the imperfections of which your indulgent courtesy must forgive—a proof of the sincere interest which Literature takes in your

careers, and of the perfect goodwill with which it hears of all your successes and notes the new and nobler status of your great profession.

An Address
ON
OUR PROFESSION, OUR PATIENTS, OUR PUBLIC, AND OUR PRESS.

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GENTLEMEN,—It may seem to many, but I hope not to all, to be something like a waste of time to consider the relationships between the profession, the press, and the public. Public support is fascinating, but fickle. In times of war soldiers are the pets of the people (and, however strange it may sound, I include all classes in that term), but in times of peace "doctors" are the fashionable craze. Society, "forsaking even military men," throws her charms to great wealth, successful humbug, the drama, and the medical profession. We should warn ourselves against judging by appearances, especially those which are nearly always deceptive. Let me take a somewhat out-of-the-way instance to show what I mean. It is often said, "He does not know his own mind." Of course not. No one knows his own mind. It is one of life's purest pleasures to make its acquaintance. We know the existence of our own minds and we infer the existence of mind in others. It is, indeed, delightful to find out, by thinking, writing, or speaking, what is "in our minds." It is a useful habit to acquire because it cultivates the rarest and best characteristic of a medical man—namely, observation. I submit it is necessary for us to see where we are and to see what we are doing, but how rarely we do see. We look, but we do not see? We do not see our work, or ourselves, or how others see us. Again, look over a landscape of undulating country, with its varied forms of green, its play of colours lit with the great, grand, golden glory of the sun. What do we see? Is the beauty of nature only the expression of successful cruelty? Again, turn for a moment and ask yourselves if the apparent calm of humanity is only what covers, but does not really conceal, the constant—and may I add cruel—struggle for existence? Is it true nowadays, when every man poses as the friend of all men, that "man's inhumanity to man makes countless thousands mourn"? Now you will ask me, What are you driving at? Simply that we must beware of our relationship to the public and see to it that it is a true and honourable position for us to occupy; simply that we should learn, not merely to look, but to see men and women and all things as they actually are, and not only as they appear to be, for all "things are not what they seem," and no man and no thing is what he or it appears to be. So, indeed, and too often, the appearance of hypocrisy or of honesty in our lives resembles the appearance of nature where peace is but war, and beauty but hidden ugliness. We do not only require lucidity in our view of the outside world, but lucidity of expression in the use of medical terms. Surely we must learn to see men and their maladies as they are. We need not pretend that we do not value public esteem and confidence, but what steps do we take to deserve either when we hide our ignorance or our knowledge under loose terms? The fashion has not yet died out of labeling as "hysterical" any group of symptoms which are inexplicable on known physiological grounds, and this at a time when we do not know with certainty either the real effect of a poultice on the skin or the functions of the liver. The modern student, especially if recently qualified, regards as "neurotic" all the symptoms which do not come within the range either of his reason or his remedies. How do too many treat the conditions which they call "neurotic" or "hypochondriacal"—meaningless epithets that are used either with that haughtiness which is a proof of ignorance or with that pity which is only another form of the same narrow-minded contempt? First of all they deny the existence of the malady, then they say there is nothing the matter, and when the patient recovers under the treatment of a man who is a physician without being a fool they then sneer at the successful colleague as a man who humbugs his patients.

A section of the profession, notwithstanding all its post-prandial sentiment, is jealous of success. Surely it is utter nonsense, because it is absolutely unreasonable and deplorably unscientific, for a person to be ill and well in the ordinary senses of the terms, or that anyone (apart from the very definite condition of malingering) can "imagine himself ill." People who are ill are ill even if we do not understand the illness, and even if we cannot treat it. Let me give one more instance, because it is one which more obviously affects our relationship to the public and our patients. I refer to our unfortunate habit of separating "functional" from "organic" maladies. Function is the expression of organic change, and functional disorder is inconceivable without organic disturbance and change; and the latter is not the least, but the most, important factor, even if unrecognised, in those disturbances of health so stupidly called "only functional." It is more conceivable to think of organic change without functional disturbance than of functional disturbance without organic change. Why is all this? Why do we talk thus to the public and to our patients and to ourselves? Why do we rely on appearances and vague terms? Why do we thus lose, or deserve to lose, public confidence? Because in hospital life and training we fail to note the value of seeing life as it is, people as they are, or the true meaning of terms. In hospitals we learn about disease, but in practice we have to treat a person with an illness. Large numbers of cases (or diseases occurring in persons) pass under our observation in hospital life, but we only see the diseases, not the persons; not only that, but both the person and the malady are removed from the conditions which would otherwise act on both; and, in addition, the greater part of our hospital life is spent in studying just those maladies which, however important as types, are least often seen in general practice. In hospitals we see, or rather look at, others treating an illness in a person, but in practice we ourselves have to treat a person with an illness. We rarely in the hospital see those deviations from what we call health which we have to treat in general practice. Thus, before we get into practice we do not see our work as it really is, but only as it appears to be. Our teachers, to whom no one is or ought to be more grateful than I am, are men who are what they are because they have been successful in hospital practice or distinguished for successful industry, and these men pass, and perhaps rightly, from the hospital to Harley-street, but they see little or nothing of ordinary general practice or the "cases" which we as general practitioners have to treat. They teach hospitalism and practise it. Men who have, therefore, to deal with patients or the public—that is to say, start in practice—are lost to some extent, have no power (because they have not the knowledge which is power) to conduct a case, know not how to treat their patients or their patients' friends, and cannot even behave themselves in a sick-room—in fact, many men only go into a sick room for the first time after they are qualified. We must remember that the proper study for the medical man, at all events, is man. A hospital is no more and no less the place to learn the diseases of mankind, so far as the relationship between patients and medical men are concerned, than are zoological gardens the proper places in which to learn or to study the natural habits of animals. Much can be found out at either place, but as at zoological gardens we see animals under unusual or unnatural conditions, so in hospitals we see illnesses and people separated from the conditions by which they are both surrounded when we as medical men have to treat them. These considerations affect the public as a body and the public individually—as our patients, as we call them. I would speak of the latter first.

A patient expects that his medical man should be something more than a mere medicine man, that he should be more than a detective to discover some pathological flaw in his health, and something more than an accountant to bring out the balance of a diagnosis from the complicated accounts of his symptoms. The public also expect much, and perhaps too much, from its public professional men in the protection of health. To us, of course, health is only a relative term, but to the public it is an attainable reality. I have never seen a case of health, and I should like to see a really healthy man, woman, or child, and it is, by-the-bye, in the detection of the insignificant departures from an indefinite standard that the skill of the medical man lies. We do not treat the

public fairly in the matter of health. For instance, we say "disinfect," but there is no reliable standard either of disinfection or a disinfectant. Again, people want to know what to do in cases of illness, emergencies, and during epidemics. What do we do? What does the profession do? It supplies the public with scientific beef-tea, not in tins, but in lectures; it attempts to boil down the hard bones of science to suit the digestion of the public intellect; it floods the press not only with watery but adulterated solutions of science, while essences of surgical treatment and tabloids of medical knowledge are manufactured wholesale for general consumption. We want to appear to know and to make others like unto us. This is what is called and appears as the popularisation of knowledge, but in reality it is the prostitution of science. No doubt a knowledge of the laws of health can be taught—the means by which homes should be kept clean and filth removed from the person and the house, the advantages of light, air, and the diet of children—but amateur medicine and surgery are less reliable than the professional articles. We think we are to teach our patients and the public what we know; if so, they must learn as we do. If our methods of teaching the public are right, then our own methods of learning are both wrong and useless. We allow the public to think we can dispense clinical therapeutics for them. People demand the knowledge how to treat illness, and we supply a lecture or a course of lectures. I have often protested, and I again beg to protest, against such "apparent teaching," against the policy of sprinkling the community, by means of a more or less oratorical pepper-box, with tit-bits of knowledge, whether pathological, physiological, obstetric, or hygienic. There are no such short cuts to knowledge. The appearance is not the reality, and as we learn so we should teach, and not otherwise. A desire to know is admirable, but the public are nowadays too inquisitive about illness. Our national manners show a deplorable lack of taste and good feeling in the presence of illness. If a man consults his lawyer he does not find all his friends asking him what is his business or why did he seek legal advice. Let such a man, however, consult his medical adviser, and at once all his friends and acquaintances—sometimes perhaps out of kindness, but more often out of curiosity, or, in the case of a celebrity, out of a feeling of snobbery—at once rush to know what his business was and why he sought medical advice. It is sad to have to add that even the medical man himself is asked concerning the case, and it is a shameful thing to have to admit that the information is often granted. The near relations of a patient may be told the nature of an illness, but without the express sanction of the patient or his closest relations no medical man has any right to make any sort of communication to anyone else—not even, I submit, to the medical press. The so-called upper classes, or certain sections, have, let us not forget, brought advertisement to an art. It is time we did something to protect the privacy of the home, especially of the sick-room. To publish clinical details, or to throw the sop of a temperature chart to the gossiping wolves, and to make the sick-room a market for advertising, are practices which are too disgusting and far too common. We all know the twaddle which is talked in the profession about advertising, especially by the sort of man who, swearing he would never advertise, advertised. Our medical press bids fair to become the mouthpiece of the would-be successful traders and of the professional Pecksniffs and Chadbands. For instance, the contribution of cases is intended to advance knowledge, not to puff practitioners. We must look up to our press, but it should represent all that is most dignified and all that is best. Look at the view which is taken by the medical press—and, of course, I am only speaking of some papers—on any subject of general interest, such as vaccination. The coarsest, the rudest, and the most insulting language is considered too good for those who, although supported by men of science and undoubted honour, feel a conscientious objection to compulsory vaccination. Dictation is not dignity, and the policy of kicking your opponents to death should hardly be the characteristic of the wonderful and advanced medical knowledge of the nineteenth century. We must bear in mind that the lay press is ever struggling to get personal details. It is, I submit, a national calamity to see the honour, purity, and responsibility of the press stained, and even in some instances washed away, by the muddy waters of competition. The necessity for paragraphs begets inaccuracy, and belief in the papers is becoming a sure sign of credulity. It is sad, indeed, to see the reckless manner in which that pompous person, "Our Own Correspondent," not only endangers the peace of nations by his highly-coloured and self-imagined crises, but violates the privacy of home life by the publication of details of illness which are generally inaccurate and always inexcusable.

We as a profession must not worship the golden calf of the "Press" too much. From what I see and hear in London, not only the press, but the profession is giving way before the rising and surging waves of competition. I may point out that, although some say competition creates commerce, yet others say it curses it. Must we, however, use such an argument? We must, I fear, if it is true that men who ought to know better and who occupy high positions are not ashamed to steal other men's patients, or to be consultants at one part of the day, physicians another, surgeons another, specialists another, general practitioners another, while all the day long they violate those rules of professional honour to which they do homage only with their lips and not with their lives. These are the men who undermine confidence with "all the kind mendacity of hints," or with a silence more suggestive than speech. When people ask for "another opinion," what they want oftentimes is a "different opinion," and they very often get it, for how many men allow themselves to be privately interviewed by friends and receive fees for such interviews when the conversation turns on "the recent consultation"? These are the men who undermine our press and our patients and force so many of the public to look upon us as money-grubbing humbugs; these are the men who get practice by a "swagger turn-out," by grand-looking houses startlingly painted, by large parties, by gorgeously dressed wives, or by pandering to the bare-faced snobbery of modern society. We must not imitate the methods by which sycophants succeed. We should value public confidence, but we should also deserve it; we should wish for respect, but we should not get it under false pretences. All the world is filled with loud praises as to the advancements in the prevention and treatment of suffering, but novelties are not necessarily improvements, as revolutions are not always reforms, or reforms always revolutions. The light which competition in the press throws into the privacy of the home also finds its way into the laboratory, and the discovery of yesterday is trumpeted as the mark of an epoch. We are thus apt to follow fashions and fads rather than facts. I well remember only about ten years ago, when I had the great privilege of being a student at Guy's Hospital (and I think every medical man should be a medical student all his life), that the profession was suffering from a very acute attack of the "spray." I know one distinguished surgeon who was almost "cut" by his colleagues for not using it. How different now! The profession is now suffering from convulsive attacks of bacteriology. When I left Guy's Hospital the spray ruled surgery, now we all worship germs. In the interests of truth we should appreciate and not exaggerate the relative value of all parts of science. I will only simply allude to "the importance of serum therapeutics," or of the policy of quieting the pathological Paul by extracts from the immunised Peter. Every problem is discussed in the press, and, owing to the habit of pseudo-philosophical generalisation from insignificant details which now characterises modern journalism, the public and our patients are misled.

In these days when the fierce light of publicity beats around a test-tube we must not so quickly take the public into our confidence, especially in the press. Our duty is to look for the truth, not to encourage competition. Our patients are led to think they know so much, and, therefore, when an illness arises they now make the diagnosis and decide on the treatment and the proper specialist to consult. The first question a lady asks when she hears her servant has got rheumatic fever is, "Can she take salicylate?" We know very little, but the public knows less. People now have one medical man for every organ, and I know a lady who consults one man for her eyes, another for her throat, another for her "chest," another for her menstrual troubles, and she herself decides "what is wrong," and then asks me to reconcile the contradictory pieces of advice which she gets from "her London doctors." The false relationships of our public, our press, and our patients to our profession are our own fault. Let us think less of our successes and more of our failures, less of the possible glory of the future and more of the darkness of the present, less of our "modern advances" and more of our modern helplessness, less of the possibilities of science and more of its simplest theories. Let us simply do what is right, and not

ostentatiously act as if we knew so much more than we do. Our knowledge is vast, but our ignorance is vaster. Those who have to treat people who are "ill" should study those who are "well." We should value character more than a certificate, and a real success more than an apparent victory. We should be as men treating other men, not as hospitalised beings treating patients. In all our relationships we should remember that kindness, gentleness, and sympathy add to the true value of skill, and that, though the powers of the head are great, the powers of the heart are greater. We can do much by our abilities, but more by our affections, and, although we now have "to live in wearied hope," yet it is not the possible only, but the perfect, we should live for, ever bearing in mind that "greatness is to take the small things of life and walk grandly among them."

An Address
ON
THE EXAMINATION SYSTEM.

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MY LORD DERBY, LADIES AND GENTLEMEN,—In searching round for some topic which should prove of general interest on the present occasion I have hit upon that of examinations. It is one which concerns us all. We have all of us been examined, most of us expect to be examined again, some of us are examiners now and others will be in the future, and, finally, a few of us are ex-examiners looking back upon our own careers and reflecting with much interest upon the whole machinery of modern education, of which examinations form such a prominent part. I am thinking not solely of our professional education, but am venturing for the moment to glance over a wider field. Examinations are the order of the day, and without much regard of sex or station in life we now see the youth of the whole community offer itself as so much subject-matter for the examiner's scrutiny. The motives for this vary in different cases. With many it is the necessity of obtaining a certificate or diploma essential to success in life, with others merely a desire to be honourably distinguished, and with yet others a conformity with custom and an unwillingness to be in any sense left behind. Various, however, as may have been the motives which have drawn students to the examination room, on one point there will have been uniformity, and it is most important. It is this, that the scope of the examination in prospect has been of all importance in determining that of the previous course of study. "This I shall want; that I shall not be asked," has been the ever-present thought in the selection of subjects for reading and thought. Whatever was deemed not likely to be asked for has been ruthlessly put aside, whatever its intrinsic interest. The demands of the examiner set the pace of study, and the breadth of the examination determines the narrowness, or otherwise, of the student's education. Such being the facts, and the probability being that they will increase in cogency as years go on, it is obviously of the utmost importance to the community that careful consideration should be given to the perfecting of our examination system. It may be a hindrance to the spread of knowledge and the development of the mental powers, or it may, if carefully managed, become a powerful aid to both.

The aim of sound education should be to convey to the coming generation as much as possible of the knowledge already acquired by its predecessors, and in doing this to still leave the faculties untrammelled and the memory not overburdened. The teacher, whilst seeking to create and to satisfy the appetite for knowledge, must above all things be on his guard lest his well-intentioned endeavours may repress it and cause disgust. I fear it is not very likely that pass or pluck examinations can ever be made to do much to foster the love of knowledge. Here and there it may by chance happen that a mind is led to see the attractiveness of some subject which would have escaped his attention had it not thus been forced upon him, just as a sportsman may see the beauty of a wild which he would never have visited but in pursuit of game. In the main, however, it is all the other way, and the fag of preparation and the innate dislike of giving reasons on compulsion create distaste rather than otherwise for the subjects concerned. Against this—it is to be feared the natural result of compulsory examinations—it is wise to take all possible precautions. Examinations should be made as little distasteful as possible. To this end it is essential, in the first place, that the element of uncertainty should as far as possible be eliminated. The candidate ought to feel throughout his studies that in presenting himself to an examiner he does that which is equivalent to placing himself on a weighing-machine, and that the verdict recorded will be in exact relation to his deserts. In proportion as the hope is indulged that success may be attained by good luck, will the thoroughness of study be neglected; and just as it may be possible to suspect that the mood of the examiner, the complexity of a question, or some other accidental circumstance may have influenced the result, will be the disappointment and vexation of a pluck. These considerations bring us at once face to face with details. It has been, I believe, the steady tendency of all examination boards to dispense with personal contact between the examiner and the examined, to trust more and more to written questions and answers. To take as instance our own College of Surgeons, the time is not so very long ago when Sir Astley Cooper and a few of his compeers met together after dinner and in a very short space of time, and with very little formality indeed, decided the fates of a batch of candidates. If a student were a man of gentlemanly bearing, if he had studied at the proper school and did not display gross ignorance, he was in no sort of danger. The examiner might ask his name and place of birth, and possibly send a kind message to his father or uncle. All this has been changed now, and so much for the better that a feeling akin to reluctance arises in asking you to entertain the question as to whether further improvements are possible. A large part of the examination is now in writing; it is divided into various departments and occupies probably as many quarters of an hour as the old one did minutes. To be personally known to an examiner is possibly now a disadvantage rather than otherwise, and the responsibility for the result is now shared by a dozen or more of conscientious men acting to a large extent in independence of each other, but never singly. Yet, in spite of these improvements, we still hear complaints—sometimes loud ones, and coming from those who have a right to make them—that the scales of the College do not always weigh correctly. A man may be rejected who was the pride of his teachers, and one may be passed whom they much mistrusted.

That I may avoid the ungracious position of appearing as the critic of a special institution, and at the same time that I may escape the necessity for repetition, I will now venture some general suggestions applicable to all examinations. The personal element, that of the examiner, should be eliminated as far as possible. To this end *viva-voce* examinations should as far as practicable be avoided. I have heard a self-confident examiner allege that he could tell better what was in a man in five minutes' conversation than by reading any number of his written papers, and I did not doubt that he thought so. This judgment of men, as it were, by personal inspection is often most fallacious, and should be permitted only with the utmost circumspection. Most certainly the impression so formed by any single examiner, or any two associated examiners, ought never to be permitted to override that of their colleagues. In other words, the result of the examination ought always to be determined by the sum of the marks gained, and no rejection should take place in consequence solely of the adverse vote of a single table. This applies to all departments of the examination, but with special emphasis to the *viva-voce*, in which no individual examiner ought to possess the power of rejection. A candidate may be at great disadvantage in the *viva-voce*, especially in the hands of an examiner who thinks it his duty to pin him to some subject in which he appears weak. The dawning perception of the possibility of rejection may deprive a good man of his resources, and ensure for him a wholly undeserved fate. Another great objection to *viva-voce* examination is that the decision must be recorded hurriedly, on the spur of the moment, and that there remain no data in evidence to which to recur. Few indeed are the subjects in which a candidate is not mos

likely to do himself justice (whether to his advantage or otherwise) in a quiet half-hour with pens and ink. It by no means follows that the disuse of the *viva-voce* would throw us back wholly on set verbal questions. There remains the extensive field of objective examination. Under this head we have the identification of specimens and the use of the microscope and of chemical tests, and the diagnosis of disease in the living patient. This kind of examination it is which conduces most of all to sound, matter-of-fact, objective teaching. It is, perhaps, the most important of all modes, and is one which in the future is destined to receive more and more attention. Although it may be admitted that the diagnosis of disease in patients can never be suitably done excepting in the presence and under the supervision of an examiner, yet it is better that the latter should not interfere by question or suggestion, and that the candidate should be permitted at his leisure to write out the opinion which he has formed.

We come next to the consideration of papers and of paper setting. Here I have an innovation to suggest. It is that examiners should not be allowed to extemporise their questions, but should be furnished with lists of approved ones out of which to select. It is impossible to deny that of those now set many are ill expressed and some wholly unsuitable. It is no legitimate part of an examination to take the candidate by surprise or confound him with the unexpected. Nor should half of the time allowed be taken up in the effort to understand what the terms of the question are intended to mean. Yet obscurities of this kind are inevitable under the present scheme of question setting, which involves the preparation of them by men under much pressure of other engagements and with but little time at their disposal. Questions suitable for examination purposes should be devised at leisure and expressed in the clearest possible language. Under this plan each separate examination should have its own catechism of questions, to which the examiner should be restricted. Of this a revised edition should be published every five years. It should be a rule that a third of the questions selected should be of the objective kind and should necessitate the recognition or description of something. By this precaution the evils of cramming might be forestalled, for the crammer must perforce become the teacher of sound knowledge. One great collateral advantage of systematic and exclusively written examinations of the kind suggested would be that those conducted by different bodies might be brought more nearly into uniformity. The written answers should be preserved, and in the case of our own profession ought to be producible at any time on the demand of the General Medical Council. Nor would there be the necessity which is now supposed to exist for the employment of seniors in the profession as examiners. Younger men, having leisure and working under the supervision of an experienced chief, might do the work not only as well, but much better. It must be noted as a distinct drawback in our present system that those employed in it are men whose time and thoughts are very fully engaged in other matters, and who come to their examination work already wearied with that of the day. A never-failing answer to all projects of reform is that the time of the examiners must be considered, and proposals which would involve either extension of time or addition of work are sure to encounter determined opposition. The machinery of examinations will, however, never work satisfactorily until considerations of time and trouble are put wholly aside. Nothing is more essential to just conclusions than that the process should be conducted with leisurely quiet; nor, let me add, should it be in the hands of those who, in consequence of frequent changes and short periods of office, are more or less inexperienced. It is the fashion to hold that anyone who knows his subject can examine in it, but in truth it is not so, and the art of examining is one which, like other arts, needs to be learned. The man who has been some years at work makes, I feel sure, other things being equal, a far more trustworthy examiner than a novice. To some extent, especially in some departments, examining should be a profession in itself. I am aware that there are differences amongst those well entitled to their opinions as to the advantages of subdivision in examinations. It is sometimes sought to throw mild ridicule on divided examinations by speaking of them as "taking your dose in teaspoonfuls." It is thought that by allowing a man to come up in one subject at a time you encourage cramming and voluntary forgetting. I may confess that my own impressions are very strongly in favour of subdivision. In their favour it may, I think, be urged, in the first place, that a much more detailed and practical knowledge may be suitably exacted at a special examination than would be demanded at one which included a great variety of topics. If, for instance, a candidate were allowed to present himself whenever he liked for his examination in ophthalmic medicine and surgery, and to take that subject by itself, he would certainly get it up in a very different fashion from what would probably be the case if he were only going to encounter the risk of a stray question or two as part of an examination in general surgery. He would, in all probability, have attended as an eager and attentive learner at some special institution. Are we to believe that he would forget what he so learnt sooner than he does the scraps of book information with which but too often he is obliged to be content under our present system? He would know well that at such a special examination a much higher standard would be demanded. Having obtained his certificate for eye disease he would proceed with cheerfulness and with a less burdened mind to other subjects. Undoubtedly much will be forgotten. That is inevitable under every plan. It is not, however, so much the mere change of the attention from one topic to another which tends to obliterate knowledge as the fact that the thing had never been really learned at all. We all remember Dr. Johnson's retort to the man who pleaded that he had "forgotten his Greek." In support of the principle of divided examinations it may also be urged that it would permit of the restoration of certain subjects, such as botany and zoology, which have been for well-known reasons left aside, and even of the insertion of others. I am here possibly on delicate ground. Permit me to say, however, that I do most certainly hold that a medical man ought to be a well-educated gentleman, and that he ought not to wholly omit from his training at any rate an elementary knowledge of those branches of natural sciences which are cognate with his special calling. It is quite true that it is no longer necessary to have studied botany in order to prescribe drugs; but there are other and yet more cogent motives for its pursuit. As a branch of the great science of biology it presents us with lessons which are full of interest and instruction. The same is to be asserted of zoology, and with perhaps only little less cogency of geology, climatology, and some other topics. The attainment of knowledge in all these is not difficult if it be sought in the right way. To that end divided examinations—not perhaps compulsory, but resulting in certificates which should be contributory—would be of great assistance.

The advocates of inclusive or comprehensive final examination—and amongst these are, I believe, some of our leading authorities on education—urge with plausibility that they are better tests of a man's memory and mental powers. To some extent this may be admitted, but their superiority in this respect is probably very limited. By no means can it be alleged that those whose memories have sufficed to carry them through an examination in half-a-dozen different subjects on one and the same occasion will subsequently retain the knowledge which they then displayed. The diploma or certificate is, unfortunately, no talisman which will secure us against the treacherous influence of the world's pursuits in obliterating the record of the labours of our student days. Some confession of weakness on the part of the present system is, I think, to be found in the limitations which it has been found needful to impose upon the scope of these many-subject examinations. Students are informed beforehand that only such and such topics will be taken. This is, perhaps, not done so much in our medical examinations as in those of general education. Thus, in botany a candidate at South Kensington is informed that fourteen natural orders only will be questioned in, and that he need not know anything of Papaveraceæ, for example, and a host of others. At Cambridge he must add Papaveraceæ to his repertory, but may still leave aside almost all the rest. At most of our examinations the important sub-kingdom of Fungi may be left out of consideration altogether. I mention these merely as examples; the same principle will be found to pervade other departments, and the result is a sort of patchwork education, the incompleteness of which is much to be regretted. Our children are taught one reign in English history, for instance, or one short period in that of Greece or Rome, and do not obtain, as I think their forefathers did, a general, though it is to be admitted a superficial, view of the whole. Modern education, in its zeal to avoid the charge of being superficial, incurs, as it seems to me, that of being merely fragmentary. It aims at thoroughness, but is obliged

at once to admit that it can attain it only in certain subjects, which, compared with the sum of human knowledge, are but few and small. Let those of us who advocate wide study, and as a consequence wide examinations, face at once this charge of encouraging a merely superficial acquaintance with things. There is much to be said in its favour. Excepting a very few of us, we are all mere smatterers as regards almost all that we think we know. It is not possible to be otherwise excepting at the cost of being wholly ignorant in many directions, and as regards fitness for the affairs of life, better by far a general acquaintance with all that is around us, though it be not very deep, than slices of profound knowledge placed sandwich-wise between thick layers of utter ignorance. In the medical profession more especially is this alternating method of education to be shunned. We cannot afford to allow attainments in one direction to counterbalance vacuity in another. Hence I think a very strong reason exists for allowing our students to subdivide their studies and take one at a time, with the understanding that they do that thing, for the time, well.

I must now, Mr. President and gentlemen, attempt a brief summary of what I fear has been a very discursive address, and then conclude. If I have given to any the impression that I am in favour of increased stringency or of increased leniency in medical examinations let me hasten to remove that idea. My plea has been rather that our examinations should become more and more an integral part of our educational system, and that by making them more exact and more definite we should enable them to better assist the labours both of teacher and student. The latter especially should be brought to feel that his examinations, so far from being sources of harass and worry, are really his best friends, in guiding his work and at the same time gauging his attainments. I have advocated frequent examination, but at the same time have urged that the student should be allowed to take one thing at a time, and thus, as it were, to have the pleasure of counting the milestones in his journey. With the hope of reducing to a minimum the uncertainties of examinations I have ventured to suggest some curtailment of the privileges of examiners, more especially that they should no longer be invited to exercise their ingenuity in devising extempore written questions, but should have supplied to them carefully prepared lists of suitable ones, which lists should also be accessible to the candidates. If on some matters I have ventured upon detail which may be thought better suited for a board of examiners than for the present audience my reply is clear. It is time that the public—in the case of our medical examinations I mean, of course, the professional public—should interest itself in this matter. It is one of the widest possible importance, and for reasons which need not now be mentioned it is one in which only reforms of a certain class should be looked for from within. No one conversant with human nature will expect from those actually holding office reforms which might be thought to reduce the dignity of that office. As to *vivâ-voce* examinations, I have suggested that they should give way to written ones. Surely we are behind the day when we keep up the custom of putting specimens into the hands of nervous students and demanding impromptu recognition, when with less expenditure of the examiner's time a quiet hour with half-a-dozen such preparations might be allowed. Who can doubt as to which would best test the pathological knowledge of the candidate? It is the same with the diagnosis of disease in patients.

Many of you listened not long ago, and I believe in this hall, to an address from one whose name stands, I may say without offence to any, as the foremost representative of surgery in Liverpool during the present generation—my friend Mr. Mitchell Banks. He took for his text "the Overcrowding of the Profession." I will not attempt to epitomise an address which was throughout racy with humour and yet solid with sense. With most of what Mr. Banks told you I thoroughly agree. More especially we are entirely at one in his conclusion, which was that the safety of the profession lies, not in new legislation of any kind, but in its own examinations. His chief proposal was to increase the stringency of the matriculation, and thus prevent at once the entrance of the illiterate. In what I have said to-day I have taken up the same idea, but have carried it a little further, suggesting that arrangements should be made throughout the whole course of study which should encourage the industrious and choke off the incompetent and idle. The key to the whole situation is in the hands of the examiner. Curricula of study are worthless without his aid, and certificates of study granted without examination are of no avail whatever. If our examinations were developed we might almost wholly dispense with both, and leave the student almost at his free will to choose and to change his places of study. Only make our examinations trustworthy and thorough and we need no other safeguards. Amongst those who hear me I doubt not there are representatives of different interests in this matter. The student has been much accustomed to regard the examiner as his enemy, and looks upon any suggestion which he thinks would make the test more stringent almost as unmitigated hardship. Paterfamilias, who has sons to pass, takes the same side with perhaps added warmth, on account of a keen recognition of the probable increase of cost. Striving practitioners who have neither sons nor nephews are, on the other hand, willing enough that the portals of the profession should be more strictly guarded. To one and all let me earnestly say that we are all in the same boat. The student of to-day will be the practitioner of to-morrow. It is possible that the supposed evils of overcrowding have been exaggerated, and I am sure that none of us would like to restrict, were it possible, the number of students to that of the supposed needs of the public for medical practitioners. We put a higher estimate on the value of medical training than would allow of our desiring any such protection. From men educated in the schools of medicine have sprung naturalists, men of science, explorers, and those foremost in every branch of knowledge. This has been our boast in the past, let us take care that we do nothing to frustrate it in the future. Let us put no artificial impediments in the way of entrance to our ranks. Let us, however, at the same time, by careful attention to the details of our examinations, make sure of this—that if we are to be overcrowded it shall be by well-educated gentlemen.

Abstracts
OF
INTRODUCTORY ADDRESSES, ETC.,
DELIVERED AT THE
LONDON AND PROVINCIAL MEDICAL SCHOOLS
AT THE
Opening of the Session, 1895-96.

ST. GEORGE'S HOSPITAL.

INTRODUCTORY ADDRESS BY MR. GEORGE D. POLLOCK.

THE following is an abstract of Mr. Pollock's remarks, delivered in the theatre of the hospital:—

"My first duty in appearing to-day in this theatre is to thank my old colleagues and the staff of the hospital and the medical school for the great honour conferred on me in entrusting to me the delivery of what is usually known as the introductory lecture at the commencement of the winter sessions—a duty which affords me much pleasure and satisfaction, for to this hospital and school I owe all my professional success and the association with many sincere and dear friends, some of whom are present on this occasion, but not a few, I regret to say, have passed away from us, leaving behind them the memory of good work done and of lives well spent for the benefit of their fellow men. It may interest you to learn something of the early life of our school and of the arrangements formerly provided for the teaching of anatomy and other subjects."

[Mr. Pollock then gave a short history of the hospital and continued:]

"When I entered here as student in 1837 there were two anatomical schools, with lectures on certain subjects not connected with the building. The lectures on chemistry were delivered at the Royal Institution in Albemarle-street by Brande and Faraday, and many a cold and wet walk have I had to get there at nine in the morning in winter. One anatomical school was in a narrow roadway which ran past the south side of the hospital to Tattersall's Yard, which then occupied a large space of ground in our rear, and upon part of which this theatre, with the museum and dissecting-room, now stand. This alteration was the result of the removal of Tattersall's stables, and for which we have to

thank His Grace the Duke of Westminster, one of our vice-presidents and liberal supporters. The other dissecting-room was in Kinnerton-street, at the back of Wilton-place, and there the lectures on anatomy, physiology, and chemistry were conducted. For several years I lectured there on anatomy, often hurried to be in time, after a long attendance in the out-patient room. Not only in this respect are the arrangements for your instruction and comfort materially improved, you have now far greater facilities for clinical work and study. Clinical work being, after all is done and ended, the most important subject to devote your time to, you cannot give too much attention to the aspects of disease or disorders by the bedside with notebook in hand; or, if a fatal termination ensue, to follow the case to the post-mortem room and record there the havoc wrought by disease. Here you will find help and instruction from our curator in the examination of each subject. The study of disease by the bedside, and the investigation of its results when fatal, will lead you to high results only to be attained by persevering labour, amidst many difficulties and oft-repeated discouragements; by labour that chooses its localities as well as its object, and refuses to produce its fruits unless it be amidst the sufferings and sorrows and dangers attendant on sickness and death; by labour that sometimes seems hardly to have begun until we are called upon to follow it in the dead-house, amidst the perishing relics of our fellow-men. But see how morbid anatomy, itself a modern science, enables us to look back, as it were through an avenue, upon the countless paths through which death has made his approach; see how we can track him in his progress, and mark how, step by step, he has gained his territory, and at last has achieved his final victory. But each such victory, if only rightly used, weakens him, while it strengthens us. We learn his wiles, and, increasing our defence, may hope to keep him from life's citadel until at last those threescore years and ten be passed, beyond which life is too often only a prolonged sorrow, whilst death, it is our glorious privilege to know, is the opening of that bright world where disease and pain are no more.

"'Death is the crown of life:
Were death denied, poor man would live in vain;
Were death denied, to live would not be life;
Were death denied, e'en fools would wish to die.'"[1]

[Mr. Pollock then dwelt upon the advantages of holding the appointments of house physicians and house surgeons. He continued:]

"Let me advise you to devote yourselves chiefly during the first winter session to the study of anatomy and physiology. Steadily occupy your time in the dissecting room, and with the assistance of the demonstrations you should almost master your anatomy to such an extent the first winter as to render dissection almost unnecessary subsequently; at any rate, with some work on anatomy, with good illustrations, such as may be found in Quain, you should be able to perfect your knowledge of the human body without difficulty. But work, constant, steady work, is essential to the attainment of this thorough knowledge of the anatomy of man. The study of the structures of the human body, when compared with the varieties of similar tissues in comparative anatomy, is of such interest that it justifies me in commending it to you for your consideration as one of great interest and intellectual pleasure. Compare the muscular development of man with that of some of the lower forms of life; the smallest insect that flies or is seen to creep on the earth possesses muscles as beautifully constructed for movement as are ours for the various actions of our limbs in everyday life. For this a nervous system is provided to call them into motion. What must be the size of that brain or nerve tissues to give action to these muscles! We cannot but acknowledge the beauty, the wonderful structure, and the harmony in all that is the life of that insect, and bow with reverence to the wonderful power that called it into being."

[The lecturer then referred to the celebrated men who had been connected with St. George's Hospital, mentioning specially Baillie, Hunter, Brodie, and Cæsar Hawkins. Continuing, he said:]

"I was much struck by an observation of Mr. Balfour made not long since at a meeting of scientific men which bears strongly in support of what has just been referred to. 'Truth, not *profit*,' he remarked, 'must necessarily be the motto of every body of scientific men who desire to be remembered by posterity in their discussions.' Gentlemen, your work must be stimulated by honest purposes and rightly directed ambition—ambition for success and a good name, ambition to succeed, if not to excel, in whatever department of your profession your future may be cast.

"'Hundreds before me vain ambition cry,
Thousands behind me common sense reply.'"

Let your ambition be tempered with common sense—rather a rare quality—backed by industry and supported by honest and right-minded conduct; and it is few, indeed, who need fail to gain that success which such conduct in most instances will not fail to secure. But bear in mind still more strongly that it is only too true, 'Ambition is a lottery in which there are many prizes, but in dissipation every man draws a blank.' Now in the practice of your profession there are many circumstances which help towards success. One not to be neglected is your personal conduct in your intercourse with your patients. Some men possess the happy gift of impressing favourably all with whom they come into contact. All do not inherit this valuable quality, but all may endeavour to acquire some portion of it. There can be no doubt that courteous and refined manners have as much influence in practice as great talent; especially is that success secure when the two are combined. Bear yourselves with consideration and kindness towards all with whom you have to deal. Ever remember that in sickness or weakness from disease a patient will appreciate sympathetic attention much more than one in health. A story once told me is perhaps as good an example of the benefits derived from amenity of manner as I can relate. A granduncle of mine who had amassed a large fortune was asked by my father what was the great secret of his success in life. He was a charming old man of most benevolent and lovable disposition. His reply was very simple, but much to the purpose: 'I have always found honey catch more flies than vinegar'—a hint that applies to your intercourse with patients equally to that of its adoption in any other call in life. The *suaviter in modo* is a motto ever to be remembered at the bedside of the sick and should always influence your conduct towards the invalid.

"'To catch Dame Fortune's golden smile assiduous wait upon her,
And gather gear by ev'ry wile that's justified by honour;
Not for to hide it in a hedge, not for a train attendant,
But for the glorious liberty of being independent.'

"Gentlemen, in the practice of your profession you will meet with a great variety of tempers, constitutions, and idiosyncrasies which will require all your care, much judgment, and not infrequently much caution to deal with. Of temper and constitution you will judge best how to manage by careful and judicious observation as cases present themselves to you. But of idiosyncrasies I must say something more.

[Mr. Pollock then referred to the importance of taking note of the idiosyncrasies of patients' foods and drugs, giving several instances, among others that of a gentleman who could not eat gooseberries without their producing an eczematous eruption on some part of the body. When dining with a fashionable party, soon after the champagne had been handed round, the gentlemen observed to a friend sitting next to him—and from whom Mr. Pollock had heard the facts—that the wine was not champagne, but gooseberry wine, and pulling up his shirt sleeve showed him the specific eczematous rash appearing. Mr. Pollock continued:]

"Lord Byron, in his reported conversations with the Countess of Blessington, remarked to her that 'medical men do not sufficiently attend to idiosyncrasies on which so much depends; and often hurry to the grave one patient by a treatment that has succeeded in another. The moment they ascertain a disease to be the same as one they have known they conclude the same remedies that cured the first must remove those of the second, not making allowance for the peculiarities of temperament, habits, and disposition, which last has a great influence in maladies.' These remarks are simple exaggerations of feeling and fact. Byron was not one enamoured of the medical profession more than he was of professors of divinity, but he was an acute observer, and it was interesting to me to read his views respecting idiosyncrasies. He judged rightly, very rightly, of their importance in connexion with the practice of medicine. Observe, gentlemen, that he makes use of the word 'cure' to denote 'treatment'—a word too frequently used without reflection by the world generally, and quite inapplicable to the circumstances of our successful attendance on the sick.

[1] Young, Narcissa, p. 528.

The empiric proclaims that the administration of certain drugs, or a combination of them, is essentially a 'cure' of such and such a complaint; but the rightly thinking and experienced medical man will tell you to bear in mind that 'cure' is not a term to be used by the educated practitioner. What can or do we 'cure' in disorders or disease? Nothing, I fear. We treat, and watch with care, 'all the ills that flesh is heir to.' By judicious treatment we may sometimes shorten an attack of illness, and probably do so in many cases of sickness; but the mysteries and course of disease are influenced much more by causes over many of which we have absolutely no control. Take, for instance, the eruptive diseases of childhood or mature life. Do we by treatment cut short the progress of scarlet fever or typhoid fever, or other disorders which need not be enumerated? The late Dr. Wilson, physician to this hospital, a great scholar and a man of great observation and reflection, was ever strongly opposed to the use of the word. It was he who first impressed me with the importance of discarding it as incorrect in all our views with respect to the action of medicines. Patients, he would observe, may recover. 'Recover' under treatment, but we do not 'cure' them. 'Some credit must be given to Nature for her assistance in the recovery.' 'Cure' is the motto of the empiric.

"There is another point of practical importance, gentlemen, to which I particularly wish to direct your attention. You will have to listen to many a tale or history of a case from a patient, or one who in practice may require your coöperation. Listen to all that may be told you with attention and consideration. But, whatever you are told, be sure to satisfy yourselves that you have facts, and not mere statements, to guide your decision, and upon which you have to form your diagnosis and decide your treatment. Take nothing for granted. Take every precaution to establish in your minds the absolute truth of all related to you, and seek for yourselves the symptoms to establish that truth. I heard it once said, and it has remained engrafted in my mind, 'that in medicine, as in most other callings, taking a thing for granted without satisfactory evidence was often the cause of more mistakes than ignorance.'

"Gentlemen, I trust you will not overlook the difficulty there is in giving even the semblance of novelty to thoughts in such a lecture as this—thoughts which have found expression a thousand times by others gone before me on similar occasions to this. My object has been governed by the desire to point out to you certain things which I believe to be true, to be useful, and of universal application, and if anything I have said shall assist in giving a nobler idea of life and its responsibilities to any of you who are now entering on the study of medicine, the purpose I have had in view will be more than amply rewarded. The medical man is often the friend—not infrequently the confidential adviser—of many a patient, quite independently of his professional relations. In this we find how highly the man may be appreciated, not infrequently greatly beloved, and many a time gratefully remembered. When in sickness the patient lies weary and tossing in his bed his mind may be much troubled by some hidden sorrow. The still small voice of conscience may be whispering something in his ear which adds to his unrest and general distress. He may need much mental as well as physical comfort. I do not wish to trespass in any degree on the province of the chaplain; but if, in the distress of mind, added to the sufferings of disease, his confidence in your sympathy and kindness of heart should induce him to refer to his mental trouble you have the opportunity of giving a word of comfort spoken in season.

"Gentlemen, my best wishes attend you, and my sincere hope is that your future will be blessed with health, happiness, and prosperity."

ST. MARY'S HOSPITAL.

INTRODUCTORY ADDRESS BY DR. A. P. LAURIE.

A PAPER was read by Dr. A. P. Laurie on "The Medical Profession and Unhealthy Trades," of which the following is an abstract:—

"In standing before you to-day I must plead complete ignorance of what is customary in opening addresses of this kind, as it has never been my fate to be present on such an occasion, and I have gleaned very little information as to what is expected or what is the nature of the subject usually dealt with. I must confess to having felt somewhat attracted to a discourse on my own department of chemistry and to the expression of views on the reform and development of the teaching of that science in medical schools, where it seems to me less might be asked of the student in knowledge of detail, and more time might be devoted to training by a careful experimental course in the scientific method of thought, thus helping to that scientific habit of mind which would be invaluable to him in his future career. Tempting as this educational question is, and important as the right using of the time devoted to pure science must be, I have decided to leave the subject alone, as I have too recently become a teacher of medical students to indulge fitly in criticisms of our present method of instruction. There is, however, a department of work which falls to many of our students to perform in after life, and which I have had the opportunity of examining into somewhat closely, and on which, therefore, I feel that I have some right to speak. I refer to their duties as certifying surgeons in connexion with the administration of the Factory Acts. It is being more and more widely recognised that we look to our medical men to prevent as much as to cure disease, and though we have not adopted the supposed Chinese method of only paying them while we are well, yet we call upon them as officers of public health, and in various other ways, to protect us from ill-health and to devise means by which disease may be warded off, so that research into preventive medicine and into the questions arising from the difficulties of keeping large and crowded populations in a healthy state are of growing importance. The administration of the various sanitary laws is largely in the hands of the medical profession, and to them is entrusted the guarding of our population from the introduction of foreign plagues like cholera, and from the spreading of diseases that are always with us. Furthermore, all the questions involved in raising and keeping a vigorous and healthy people are in their hands for solution, so that they might well be named the guardians of the public health. And if it is the duty of our navy to protect our shores from foreign foes, to the medical profession is entrusted the far more difficult task of waging an internecine civil war against intestine enemies. Among the many problems of healthy living to which our complex civilisation has given rise few are more interesting or worthy of study than those associated with the growth and development of our industrial system. The necessity for the rapid and continuous production of enormous quantities of articles of commerce has given rise to innumerable difficulties in connexion with the health of those employed in such productions. The insidious effects of long and persistent exposure to influences which for a short period would probably do little harm are pressing themselves on the attention of our medical men and our legislators. For example, the occasional handling of white lead or breathing of a vitiated or dust-laden atmosphere is harmless enough, but prolonged exposure to the same conditions produces terrible results. Attempts, therefore, have been made to meet these evils by special regulations and Acts of Parliament dealing with unhealthy trades, and the Home Office, with its zealous army of inspectors, does what it can to impose these regulations for the preservation of health on the workshop. But though much has been done in this direction much more must be done before results sufficient to satisfy the conscience of the nation shall have been obtained. Few realise who have not investigated them how difficult are the problems involved in this question or how intricate the whole subject is, and yet it is one which has received comparatively little attention from the medical profession. It was my good fortune to be appointed a member of the Home Office Committee which inquired two years ago into the results produced on the health of the operatives by pottery manufacture, and I was specially struck by the fact that most of the local medical men of the district who came before us as witnesses had so little information to give us. Evidently their attention had never been specially turned to the question, and they had missed the opportunity afforded them of making a most interesting series of investigations. There are, of course, many noble exceptions. The name of Dr. Arlidge will always be remembered as a pioneer in this department, and the researches of Dr. Oliver into the poisoning in white lead manufacture have pointed the road to be followed by others; but in spite of these men little has yet been done in the way of scientific inquiry, with the view of remedying the evils produced under modern conditions of industry. In too many of our industries the life of the worker is one long tragedy of physical suffering, and no thoughtful

man can study the physical state of the population in many of our manufacturing centres without dreading that in the struggle for commercial supremacy we are sacrificing the health and vigour of our people and are obtaining riches at the price of racial degeneration. Some may reply, Surely our factory legislation has already dealt with these problems, and the necessary steps have already been taken to ward off such dangers. It is true that much has been done, and the laws protecting the labour of women and children and the regulations requiring cleanliness and ventilation have been of incalculable benefit to the industrial population; but the questions which now arise are more difficult and do not the less press for a solution. The whole of the problems involved in the handling of poisonous substances, and in the breathing of a dust-laden and vitiated atmosphere, and in the working in excessively high temperatures, are still in most cases awaiting solution. It is true that the Home Office has made vigorous efforts to deal with some of them by special inquiry and special rules; but, speaking as a member of one of these committees of inquiry, I do not fear to say that the result of that inquiry was to my mind merely to state clearly the problems awaiting solution in that particular industry, but not to solve them, and to prove that it was only by systematic research by trained experts on the spot that permanent and satisfactory results can be hoped for. What, then, is the present state of affairs?"

[Dr. Laurie then proceeded to give a brief historical *résumé* of our factory legislation, adopting as a starting-point the great Consolidating Act of 1878. He continued:]

"This brief historical survey is, I think, sufficient to show that the Home Office has been rapidly acquiring very heavy responsibilities and complex duties with reference to protecting the health of the workers, and that these duties are of a kind which it is surely obvious cannot be satisfactorily fulfilled by the ordinary staff of inspectors. The public are too apt to assume that when special rules have been drawn up the work is completed, while it would be more correct to say it is only then begun. Special rules have not been found adequate to remove those evils in the past and are not likely to prove adequate in the future; they merely form a basis for further inquiry and research. And surely the great advance which has been made as the result of the inquiries of four or five expert committees shows how much might be hoped for from the employment of continuous expert assistance in the future. Let us now look briefly at the reports of some of those committees and see what light they throw on the question. These reports are worthy of study by all medical men interested in public health questions, and contain a great deal of interesting information, but it is impossible to read them and not feel that the information obtained is inevitably imperfect and the proposed remedial measures of a tentative character. In fact, in the report by the Potteries Committee this is brought out very clearly by the committee themselves. They ask 'to be empowered to continue their investigations as to the composition of glazes and colours with a view of finding out how far it is practicable to make a glaze that shall be harmless to those employed and at the same time shall not injure the ware.' In another paragraph they say: 'Further information is also required as to the temperature of potters' workshops and of stoves at the time of drawing the ware.' Further on, speaking of the same subject, they say: 'We have already in Rule 7 attempted to deal with the temperature of workshops, but do not consider the rule in its present shape as final,' and so on. Similarly the reports of the other committees are full of suggestions as to modifications of machinery and processes which would result in far more benefit than the special rules, and which, when adopted by manufacturers, should be carefully watched and reported on from time to time with a view, if successful, to their ultimate universal adoption. Now, zealous and efficient as the factory inspectors are, they cannot be expected, overburdened already by the increasing number of duties they have to perform, to be able to observe what the effects of the special rules are on the health of the operatives, or to discover which are of value or what modifications are necessary, for, apart from the fact that they are already overworked, such observations require a medical training. As an example of a case where scientific observation is required let me take the Cotton Cloth Act requiring the regulation of the temperature and humidity of the air in the weaving sheds. This Act, as I have already stated, has produced a complete revolution in the methods of ventilating the weaving sheds, and gives the opportunity of studying on an enormous scale the results of artificial ventilation on the health of thousands of people, and the value of the new methods as compared with the old. A careful recording of this experiment would be of the utmost importance in guiding us in the ventilation of factories and schoolrooms, and yet, as far as I am aware, no one is watching and recording the results, or, if it is being done, some private enthusiast is engaged in the work, and the Home Office, having instituted this interesting alteration on the air supplied to thousands of operatives, with a magnificent carelessness, does not even watch and record the results of its own experiment. The same criticism applies to the special rules which have been applied to other trades, for they all involve regulations introduced to affect the health conditions under which the operative works, and yet no observations by experts are being made to see if they effect their purpose. We have, therefore, most valuable experiments being made upon this most important subject without any proper record or criticism of the results. But we can go further than this. Questions are arising and will arise in connexion with these special rules and the various modifications of manufacturing processes which are always taking place which the Factory Department of the Home Office, having no experts to apply to, are incapable of solving. I know of one case where a manufacturer applied to the local inspector to be relieved from certain special rules because of certain modifications in processes of manufacture, and the question was referred by the inspector to the Factory Department, referred by the head of the department to the Home Secretary, and by the Home Secretary to the local inspector, and by the local inspector to the manufacturer, who, being the only expert in the whole chain, gave judgment on his own application. What, then, you will ask, is required to enable the department to deal with these questions of increasing difficulty, and to advance further in its battle with disease and death? There are two proposals which I should like to suggest, and which are, I think, worthy of consideration, proposals dealing with the central and the local organisation respectively. In the first place, to deal with the local organisation there is a body of men to whom I referred in the beginning, the certifying surgeons, of which sufficient use is not being made. Let me begin by briefly stating the present position and duties of the certifying surgeon. He is appointed by the Factory Inspector of the district and has two duties to perform. In the first place he has to examine all children and young persons in his district who are about to be employed in factories, and without his certificate of fitness they cannot be employed. For this duty he receives from 2*s.* 6*d.* to 7*s.* 6*d.* for each visit, and 6*d.* for each child examined over five in number, when the examination is made at the factory, and 6*d.* for each child when at some place appointed by him. This is done only in cases when the number of children is under five. In the second place, accidents must be notified to him, when he must go and make an inquiry, and has a right of entry into the factory for this purpose. A special fee is paid for this also. Now, is it not possible to extend the powers and duties of the certifying surgeon, and, if I may make a further suggestion, his pay? Would it not be possible to use him to make continuous observations on the health of the operatives and the effects of new regulations and report to the Home Office on the same, and would not the money so expended be well spent, and is it not worthy of consideration whether the status and method of payment of the certifying surgeon could not be improved? I know of one certifying surgeon who has received exactly 2*s.* 6*d.* in fees in three years, in return for which he had to fill up innumerable forms and reports to the Home Office. This can hardly be regarded as a lucrative appointment. In fact, we have here an expert staff already in touch with our factory system, and responsible for the fitness of the operatives at the beginning of their career, which might, if properly encouraged, supply us with invaluable information; and, furthermore, in the Factory Act of 1895 a clause has been introduced giving power to the Home Secretary to call on the certifying surgeon to make special inquiries, which opens the door to my proposal. But it is not only locally that the expert is required; the work done by the temporary expert committees appointed by Mr. Asquith has shown the value of expert advice. Why should not the Home Office have an expert consultation committee attached to the factory department, consisting of medical men, manufacturers, men of science, and engineers, who should have power to inquire into and report on and advise on questions affecting the health of the operatives?

In this way much useful work could be done. So far I have only treated of this matter from the point of view of the operative, but I am sure the manufacturer would also welcome my proposal. He, too often, feels that he is subjected to vexatious regulations, involving trouble and expense, but which do not go to the root of the matter, by a department which, though well-meaning, is ignorant; and, while willing to submit to such regulations when evidently leading to improvement in the health of his work-people, he is irritated by restrictions which he knows to be useless. Such an expert committee would give him more confidence in the factory department and make him submit to their conditions with better grace. It is, therefore, in this direction that I venture to think the next step in advance is to be made, and, in conclusion, I would wish to press upon our future medical men the importance of these questions. Noble as the work of curing disease undoubtedly is, that of preventing disease is nobler, and there are many thousands in our great manufacturing cities the victims of our industrial conditions, living lives of hopeless ill-health, that are looking for deliverance—a deliverance which is only to be obtained for them by men who combine the calm, clear intellect of the man of science, with a burning compassion for the sufferings of their fellows, a combination of qualities which is to be found most frequently in the medical profession."

MIDDLESEX HOSPITAL.

INTRODUCTORY ADDRESS BY DR. JULIUS MICKLE.

THE address was chiefly devoted to discussing the manner in which the knowledge of a simple external object is obtained, and in drawing therefrom conclusions as to the only proper, natural, and fitting methods of medical study.

In the first place, it was shown that in the mental development of children the acquirement of a knowledge of a simple object is a gradual affair, and only succeeding after many attempts. That, simple as it may appear, is only arrived at gradually and after failure of the earliest attempts, so that only little by little is the knowing achieved; and any very early error must be corrected by subsequent experience; so that there is a process of learning, and of overcoming difficulties, in order to know the simplest object. Applying this to medical study, it was pointed out that if the natural and fitting method be followed the process must be gradual, that it must begin with the most simple, which must be thoroughly mastered before the study of the more complex is undertaken. In the second place, in knowing a simple object, of a certain class, there must be a synthesis of the evidence derived from certain senses concerned, and a conjunction of that of the several senses coöperating in the process. The importance of the sensations of sight, of touch, and of those attending movement was indicated, and the inextricable manner in which the feelings of movement are bound up with the visual and tactile sensations was insisted upon. The importance of the movements of the eye and hand in vision and in active touch was referred to, and the sensations derived from other senses—such as hearing, taste, and smell—were shown to have their part in the process of perception of the particular object which was used in illustration of this part of the address. In the application of this to medical studies, it was maintained that in them it is necessary as far as possible to use all the activities of the mind and to use them in coöperation. The importance of great width of culture in medicine was asserted, and the characters were mentioned which any sound specialism must possess, and especially that it must be built on the firm foundation of a wide and complete study of medical and other science. In relation to this, and as examples to follow, were mentioned the wide bases on which were built the medical acquirements of two eminent members of the profession recently lost by death—one Mr. Hulke, who, having a profound knowledge of general surgery, was also an expert in ophthalmic science, was of great repute in palæontology, and of very considerable attainments as a linguist. The other was the late Dr. Bristowe, who, to a profound knowledge of general medicine, had added a special knowledge of pathology, and of diseases of the nervous system, abdomen, and skin. In the third place, for accurate knowledge of the simple object it was shown that there is a process of search for accuracy, a process (so to speak) of working towards truthfulness, so as to secure a truthful mental representation of the object, and to correct any error of sense by the truthful evidence of other senses. And, moreover, that what is true with regard to these simple products of mental activity is true also of the outcomes of all the higher and the highest activities of mind and their collateral results, and therefore involves the accuracy of the highest thoughts or ideas. This proved the necessity of using in medical research and study the utmost fidelity, the honest intention of truthfulness to nature, and the necessity of correcting any error that may arise by the critical operation of other forms of mental action. And, in regard to this part of the subject, the predominant importance of making medical study as faithful as possible to nature was urged, as well as that in medical research and study there should be a perfectly unbiased, fair, consistent, judicial frame of mind, employing in its service all the modes of mental action, and honestly seeking to attain that which is true; that, in a word, medical study should be an honest, consistent, persistent search for truth, and made with all the powers of the student and practitioner.

Other topics relating to the main one were also touched upon.

ST. BARTHOLOMEW'S HOSPITAL.

INTRODUCTORY REMARKS TO THE COURSE OF MEDICINE BY SIR DYCE DUCKWORTH.

"IN beginning to-day the course of systematic lectures on the Practice of Physic, I have little to add to the introductory remarks I ventured to offer to those who sat where you now do at this time last year. I then counselled the importance of systematic prelections in opposition to a modern, and still prevailing, opinion that the day for such a method of teaching had passed by, and that the best training in medicine was only to be gained by an expansion of the tutorial system and by assiduity at the bedside of patients. I entirely accept both of the latter methods, and we afford you in this school the largest measure of each of them. But I no less strongly insist on the great value to you of a diligent attendance on systematic lectures in medicine, surgery, and midwifery, in addition to your tutorial and bedside work. You need all of these. Our systematic courses are now shortened and disencumbered of much that was imported into them in my student days, and I venture to believe that you may gather much from the experience of your senior teachers, which, be it remembered, reposes on a larger basis of observation than can be had from even the fullest hospital opportunities. I may here and now tell you of the activity that is on all hands prevalent in research bearing on practical medicine. Almost every problem is the subject of careful inquiry, and these pursuits are followed with a remarkable degree of industry by an army of trained investigators. We note the patient scientific research student, working often with no other prospect than that of the hope of discovering the secrets of Nature, not seeking mere results, but for the precious kernel of truth. And in labours such as these how little do we think of the failures and disappointments that always befall honest investigators—almost heartbreaking when the expenditure of time and effort is considered. We seldom, indeed, hear of these, but now and then we have the curtain lifted and the light let in with startling effulgence. A line of thought such as this leads me at this moment to recall to you the glorious life-work of that splendid French *sarant* so lately taken to his rest amidst the regrets and affection of his compatriots and of scientific men the world over. The life of Louis Pasteur was in every sense a full one. Though not a member of our profession, he probably did more for practical medicine and surgery than all the physicians of this century. This is not the time, nor am I the person, to descant at length on the triumphs of his patience, perseverance, and genius. You are familiar already with many of them. Unselfish, modest, unspoiled by success, fearless, simple, a fervid patriot, a true Christian—such was this great and good man. What a career is his to contemplate in these days of indecent pushing and self-advertisement, what a magnificent lesson does his life afford to those who labour for the truth's sake, and what a moral loftiness it sets before all of us. Think of the aspersions and calumny often cast upon him, and how he bore with the taunts and puling nonsense that were hurled at him by silly sciolists. Like the waves beating on the rocks, like the idle wind, to him all these. He went on his way with the one great aim to seek God's truth, to help his suffering fellow-creatures,

and to show to his generation and to all who shall follow him how the secrets of Nature are alone to be wrested from her and placed amongst the eternal certainties. We cannot yet tell all we owe to the labours of Pasteur, but we feel sure that no man ever did more to help us as physicians and surgeons, and we cannot doubt that many generations in the days to come will rise up and bless his name. 'Exstinctus amabitur idem.'"

THE PHARMACEUTICAL SOCIETY.

INTRODUCTORY ADDRESS BY PROFESSOR FREDERICK T. ROBERTS, M.D., F.R.C.P.

THE address was delivered before the society by the lecturer on Wednesday, Oct. 2nd, 1895.

After some introductory remarks Professor Roberts drew attention briefly to the history of the Pharmaceutical Society and School of Pharmacy, and eulogised the founders of the institution, as well as its professors and teachers from its establishment until the present time. Addressing the students, the lecturer then proceeded to lay before them certain thoughts which had suggested themselves to him, and which, he trusted, might not be without some influence for good. He continued:—

"First, entertain and cherish constantly a high conception and standard in relation to the nature of your calling, its purposes and aims, its possible achievements, and its social status. It is of no use attempting to conceal or deny the facts that in past times the business of a 'chemist and druggist' was generally but a 'paltry trade,' and that the apprentice who was supposed to be learning pharmacy was often nothing but a 'shop-boy employed to fetch and carry.' Indeed, I very much fear that such a description will still apply not uncommonly. This ought not to be, and pharmaceutical chemists as a body should do their utmost to make it impossible for such a state of things any longer to exist. But obviously if pharmacy is to reach and retain its proper and legitimate status, those who are engaged in its practice must be adequately instructed and trained. I cannot now enter into any discussion as to what should be the exact scope and extent of the instruction and training, or the range and degree of severity of the examinations, especially as I understand that on these points there are differences of opinion even amongst those who have the interests of pharmacy at heart. I venture to affirm, however, that the higher you aim, within due and well-understood limits, whether in regard to general culture, instruction in your own special subjects, scientific and practical training, or qualifying examinations, the better will it be for pharmacists as a body as well as for the community at large. Of course, the fact must be fully recognised that the pharmaceutical chemist cannot ignore the business aspect of his vocation, but I really cannot conceive of anyone, because he is an 'educated pharmacist,' being ashamed of his business. And here let me say that, speaking personally, I certainly do not claim any abstract social superiority for the vocation of the medical practitioner over that of the pharmacist, or that there is any line of demarcation between them. Their relative position must very much depend on individual attainments, character, and actions; and in my opinion the educated pharmacist may fairly regard himself as a 'professional man' if he acts accordingly, and 'carries out everything in a true professional spirit.'

"I now proceed to deal with another point which experience has taught me that it is desirable and necessary to urge and impress again and again upon students, especially upon those who are beginning their career. It is that you should conscientiously realise your responsibilities and fully appreciate your opportunities, taking the utmost advantage of the excellent means of instruction and training, both scientific and practical, which are now at your command. Certainly your advantages here are great, and I strongly advise you to live up to them. To pass your necessary examinations is the lowest point that you can possibly aim at, but you may go as far beyond as your ambition prompts or your opportunities permit."

[Professor Roberts then proceeded to refer to certain practical questions bearing upon the relations existing between the medical profession and that of pharmacy. He affirmed that there is certainly no inherent antagonism between the medical man and the pharmaceutical chemist in any sense whatever, as a superficial glance at much that is going on might lead one to suppose. On the contrary, there should be nothing approaching want of harmony or discord between them, and they ought to work together earnestly and cordially for the common good. He then continued:]

"Assuming, then, that we are well-disposed towards each other, I, as a member of the medical profession, claim from you pharmacists protection against certain dangers and evils with which we are really impotent to deal. In the first place we look to you to guarantee, within reasonable limits, that we are supplied with efficient, active, pure, and unadulterated drugs. Moreover, I cannot refrain from saying a few words about what I may term 'irresponsible pharmacy,' upon which I very much wish that the Pharmaceutical Society could exercise some check. Pharmacy is really in a somewhat curious state just now, and the number and variety of preparations and compounds one sees advertised for every kind of complaint, each vying with the other in brag and boastfulness, are positively most confusing and overwhelming. Up to a certain point of course this is very pleasant and helpful, but there are limits. Amongst other matters, I affirm that it is decidedly wrong that so many drugs, some of them very powerful and even dangerous, are now supplied freely to the public at large in the form of tabloids, capsules, and the like, which they can consume or use in other ways to any extent at their own discretion, and altogether apart from medical supervision. Again, I must enter my emphatic protest against the extreme haste which is exhibited to flood the market with all kinds of new drugs and special remedies, in endless variety of preparations and methods of administration, either before they have been fairly studied or tested at all, or only in a most superficial and inadequate manner."

[Professor Roberts then said that in order to maintain cordial and friendly relations between medical men and pharmacists he presumed it would be generally agreed that it is most desirable that they should keep to their respective spheres as strictly as possible. He discussed the question of dispensing by general practitioners and regretted that for obvious reasons this long-established custom could not in the meantime be changed. He then proceeded:]

"There is another aspect of affairs which I feel bound to notice, though I may be venturing on delicate ground. I allude to the 'prescribing chemist.' Whether I give offence or not, I must unhesitatingly and emphatically declare that for him there is no excuse whatever. He has never been educated or trained in any sense for the position which he assumes, and is certain to do infinite harm in a variety of ways. Therefore I earnestly exhort you, whom I am now addressing as students, from the very outset steadfastly to resist every temptation to resort to such a practice, and not to be led under any circumstances into what is an unfair and illegal competition with the medical profession. I feel ashamed to acknowledge that there are practices prevalent amongst a certain class of qualified medical men which are not one whit better than those of the 'prescribing chemist.' The running of 'cheap dispensaries,' where 'advice and medicine' are supplied to all comers without the slightest pretension to 'clinical investigation,' and, as a rule, at a figure that I feel sure would make you blush if I mentioned it; and the extensive employment by medical men of 'unqualified assistants,' who are absolutely ignorant and incapable, and not a few of whom are but the wreck of immoral and degraded lives, are standing blots upon our profession, and it is a scandal that it is possible for such practices to continue.

"It is pleasant to pass from controversial questions, and to consider for a moment that of coöperation, which in these days is such an attractive word. Taking a comprehensive glance at the existing state of things, and looking forward into the future, one cannot fail to see many directions along which the authorities who guide the affairs of the medical profession and the Pharmaceutical Society, as well as the general body of members of the respective branches, may and ought to work together on legitimate and rational lines. I believe that we all desire a higher standard of education, and that true knowledge and culture may be more widely disseminated among our ranks. What will be the actual course of events in the future it is difficult or even impossible to foretell. The administration of internal organs or their products in different forms; the introduction of serum-therapeutics, with the injection of antitoxins and the like; the development of physical methods of treatment; and other modern therapeutic novelties, are unquestionably revolutionising our ideas about treatment in many respects.

For some notions and expectations still widely entertained there is no foundation whatever, and amongst them I confidently affirm is that of the cure of pulmonary phthisis by subcutaneous injections of various kinds. I thought that this craze had received a salutary check, but I see it has recently broken out again violently in a new place. Apart from other aspects of the matter, it is a cruel thing to hold out such illusory hopes to those suffering from this terrible disease, for which so much can really be done by rational methods."

[Professor Roberts then addressed a few words of general exhortation and encouragement to the students, and concluded as follows:]

"And now, in closing, let me offer my cordial congratulations to the successful winners of prizes and distinctions who have come before us to-day, and my no less cordial encouragement to those who for the present have not achieved all that they aimed at or desired. May you all work on loyally, steadfastly, hopefully, and cheerfully, conscientiously striving to fit yourselves for the important public duties that lie before you in the future, so that, whatever position you may in the course of events be called upon to occupy, you may be enabled, not only as accomplished and successful pharmacists, but as men and women of 'high personal character, moral rectitude, and fine sense of honour,' faithfully to serve your day and generation, and to contribute your due share to the well-being and progress of humanity."

LONDON SCHOOL OF MEDICINE FOR WOMEN.

INTRODUCTORY ADDRESS BY MISS ELLABY, M.D. PARIS.

MISS ELLABY began by reminding the students of the legend of the House of Busyraine, comparing the treasure of knowledge to Love's Prisoner well guarded within the house by three iron doors, for which each one must find the key for himself. She continued:

"Over each door was an inscription; over the first, 'Be Bolde'; over the second, 'Be Bolde, be Bolde, and everywhere be Bolde'; but over the third came a sudden check—'Be not too Bolde.' In the search after medical knowledge students would do well to adopt these mottoes as emblems of the courage, tempered by wisdom, required to seize and to put to its best use this treasure when found. But 'life is short, art is long,' &c., says Hippocrates, so in addition we need haste, but with the same check—not too great haste. *Festina lente*—make haste slowly. This triple armour—Courage, Wisdom, Speed—will prove all-sufficient for any battle. The study of medicine should be, like all other kinds of education, 'brave and preventive.' For this we need the all-round development of our whole nature, which will give us the power to grasp all details of a question, and to approach it from a higher level; in this way our judgment will be divested of every personal element, and we shall be enabled to act without vacillation or delay. Very close to this comes the question of our relation with other people or our manners. These should be the 'happy way of doing things,' and this 'happy way,' if we have it, helps us on to cultivate and to possess a real sympathy with others—one of the keys by which to unlock the secrets in nature. This sympathy will also make us tolerant and large-minded enough to appreciate other people's opinions and judgments even when they differ from our own. On the importance of health, especially in connexion with the bugbear of over-work, I fear 'others' follies teach us not,' and we must each fight our own battles: provided only that the experience gained does not come too late, and that our precious Pegasus of health is inside the stable and not outside when at last we proceed to shut the door. I will refer to one point only, and that is the temptation, which I think besets every earnest student at the outset, to spend too many hours consecutively at work. The attempt to accumulate many facts is only satisfying for the moment, for facts must soak into the mental soil, and not lie upon it. The object of our study is the cultivation of our reason as well as of our understanding; we should not, therefore, overload our minds with facts, but regard them as a means to an end, and not the end itself. Above all, do not grudge the time spent in recreation and outside your work, for it is then that our fuller and larger views of life come to us. I do not think the advice the Emperor Alexander gave to the Poles, 'Above all, no dreams,' good for general application, for in the somewhat prosaic details of our daily life they come as a help, and not as a hindrance, if we keep them in a right proportion to work or action. So I would say again, Do not overcrowd the day with work, but give yourselves time for recreation, thought, and meditation, and even for dreaming—have, in fact, the leisure that the busiest people often possess, which is much more the habit of an open mind than the actual amount of spare time to be disposed of. In your career there will be valuable opportunities, which will be very much what you choose to make them. It has been said that the tragedy of all souls lies in the gulf which separates our ambition from its realisation, and we, who look back, find that the saddest elements there are our wasted opportunities. Do not let them slip, but seize them at the right moment; for 'Occasion,' says Bacon, 'turns a Bald Noddle after she hath presented her locks in front, and no hold taken ..... there is surely no greater wisdom than well to time the Beginnings and Onsets of things.' It is perhaps too fatalistic to say that 'character is destiny,' but it is nevertheless true that our destiny is very much what our character makes it. We must lean on ourselves, turn our talents to account in every particular, and be, as Goethe says, 'not the creatures but the architects of circumstances.' You are all to be members of a very noble profession, and you have each one a fine career open before you. It is not in the power of everyone to be a genius or to make a mark in the world, but it does rest with each one of us to make, as Jean Paul Richter says, 'as much of ourselves as could be made out of the stuff.' This is only to be done by steady all-round work and patient, humble searching after truth. In this way we can all endeavour to contribute our mite, not only to the use but also to the beauty of life, for 'all things are for the sake of the good, and it is the cause of everything beautiful.' I will, conclude with the words of one of our greatest philosophers specially applicable perhaps to the student in medicine: 'And, generally, it is good to commit the Beginnings of all great actions to Argos, with his hundred eyes; and the Ends to Briareus, with his hundred hands: First to watch, and then to Speed. For the helmet of Pluto, which maketh the Politicke Man goe invisible, is, Secresy in the Counsell, and Celerity in the Execution.'"

YORKSHIRE COLLEGE, LEEDS.

INTRODUCTORY ADDRESS BY DR. D. J. LEECH.

THE lecturer, who is Professor of Materia Medica and Therapeutics at the Owens College, Manchester, chose for his subject "Our Forefathers." The address was delivered at the opening of the Medical Department of Yorkshire College, Leeds, on Oct. 1st. After some introductory remarks he continued as follows:—

"Mr. Herbert Spencer in an article in the June number of the *Contemporary Review* claims for the medical profession a sacerdotal origin. He points out that the union of the functions of physician and priest is a normal trait in early societies, the priest being the recognised physician in some, whilst in others the physician has assumed to a considerable extent the functions of the priest. Even the medicinal effects wrought by plants were, he thinks, originally attributed to the spirits dwelling in them, and the medicine men of uncivilised peoples have always combated disease by driving out evil spirits as well as by natural remedies. He considers, however, that the physician originates rather from the priest properly so called, who deals with ghosts, not antagonistically, but sympathetically, than from the native medicine man. The priestly caste, he says, in an early state of civilisation develops culture, and from part of this culture having its origin in previous stages comes greater knowledge of medicinal agents, which gradually cease to be considered as acting supernaturally. Mr. Spencer, then, seems to be of opinion that treatment by remedial agents owes its introduction to ideas concerning the supernatural, that the priesthood added to medical knowledge thus initiated, and that medicine and the medical profession of the present time have originated from the basis thus established by them. This view, I think, is open to many objections. Doubtless, a very close connexion has existed from very early times between medical treatment and the belief in the efficacy of supernatural means for the cure of disease; but it seems to me there is no evidence that the initiation of the treatment of disease by remedial agents has developed from ideas relating to the part which gods and supernatural agencies play in the production and cure of disease.

"The origin of the treatment of disease by remedial agents was the subject of speculation in very early times. It has been thought by some to have sprung from the same

instincts which seem to lead animals under certain conditions to eat when ill substances they usually avoid; others—e.g., Schmiedeberg—have suggested that man has imitated the habits of animals in this matter. In the treatise of ancient medicine included in the works bearing the name of Hippocrates, and which Littré believes were written by the Father of Medicine himself, the belief is expressed that medical treatment arose from observations on the different influences of foods and their properties in health and disease. In connexion with this view it is interesting to note that in the earliest works relating to treatment dietetic substances play a leading part in remedial agents. The oldest document bearing on medical matters we possess was discovered in 1889 at Kahun, near the pyramid of Illahun, in the ruins of an ancient town which has been apparently inhabited by the builders of the pyramid. It dates from the Twelfth Dynasty—2700–2500 B.C., more than 1000 years before the Exodus. It consists of instructions for midwives and includes prescriptions for treatment. Into these, articles of diet largely enter—namely, beer, cow's milk, oil, dates, and other fruits, herbs, sweet beer, honey, onions, &c. In the prescriptions of the medical papyrus obtained by Ebers at Thebes, and usually bearing his name, the same feature is well marked. This most ancient of pharmacopœias was found between the legs of a mummy. There is a general consensus of opinion that it was compiled about 1500 B.C., though some of its contents date from an earlier period. It consists of formulæ for the treatment of a large number of ailments, both external and internal, some very simple, consisting of one or two ingredients only; others more complex, containing twelve to fifteen drugs, and directions more or less precise are given for their preparation and use. Most of the drugs are derived from indigenous plants, but a few minerals, such as alum, salt, nitre, and sulphate of copper, are also found in them. Some of the ingredients cannot be recognised.

"In the prescriptions of the papyrus of Ebers dietetic substances largely predominate; honey, milk, bread paste, several cereals, fruits, such as figs, plums, grapes, melons, and dates, and like substances are found in a very large proportion of the prescriptions, and that they were not used simply for flavouring purposes seems evident from the fact that many of the medicines are entirely composed of them. It is probable, too, that in addition to the large number of substances in this pharmacopœia which we recognise as foods many of the other components which we look upon as drugs were used in ancient times for culinary purposes. Maspero points out that in the time of the Pharaohs castor oil was probably taken regularly in food; indeed, it is yet a favourite condiment amongst the Egyptian fellaheen, who flavour their salads with it. He thinks that the Egyptians 'began by eating every kind of food which the country produced. Many of these, when their therapeutic virtues had been learned by experience, were gradually banished as articles of food and their use was restricted to medicine; others fell into disuse and only appeared at sacrifices and funeral feasts.'

"In the drugs used by savage tribes foods and substances capable of being used as such predominate as they did in Egypt of old, and, as was the case in Egypt, active poisons are comparatively rarely used as medicines. As medical knowledge has advanced, foods have been for the most part replaced in the treatment of disease by more active agents, but they have not yet entirely disappeared. The lettuce and pearl barley, with its preparation decoctum hordei, are to be found in the list of remedial agents in the present edition of the British Pharmacopœia, and constitute a connecting link between the medicine of the present day and its origin in the dim past. It is not difficult to account for the prevalence of foods and the absence of active poisons in primitive medicine. The favourable changes in certain forms of disease which follow vomiting or excessive action of the bowels, skin, and kidneys must have attracted the attention of man in the earliest stage of his development. In his search for food he would note in the first place the substances which, when taken, cause death soon, and these he would entirely discard. His attention would also be drawn to certain animal, vegetable, and mineral products giving rise to vomiting, purgation, diaphoresis, or diuresis, and even the most untutored mind would infer that advantages might follow their administration in the diseases where emesis or an increase of the secretions had been found beneficial. The character of the earlier formularies and of those of uncivilised people points to an origin of medicinal treatment from observation, and it is from this treatment that has sprung the medicine of to-day. That arising from superstitious ideas has been gradually discarded.

"By what class of people was the treatment of disease introduced? Who were the earliest forefathers of the medical profession? Mr. Spencer says the priests, giving as a reason for his view the close connexion of the function of the priest and physician in early societies. As we go back into Egyptian medical history we do not find evidence of a greater influence of the priesthood in medicine, but rather the reverse. In Greek literature the earliest allusion to the healing art is found in Homer, who represents it as derived from the gods indeed, but in the hands, not of priests, but of warriors, and, to a certain extent, of women. The only two physicians named in the Greek army are Machaon and Podalirius, who were also warriors and led thirty ships to the siege of Troy. Their father, Esculapius, is represented as a chieftain to whom Chiron taught the healing art as he did to Achilles. There is no allusion to temples open for the sick or to priestly medicine. How early a distinct medical class was developed out of the primitive system of medical practice which the Homeric poems delineate is not known. Pythagoras (580–510 B.C.) and other philosophers mixed up a little practical medicine with their speculative doctrines. At the end of the sixth century we hear of a famous Greek physician, Democedes, curing the King of Persia when the Egyptian physicians failed, and at the end of the fifth a Greek, Ktesias, was physician to the Persian Court, and Hippocrates wrote his famous works. In almost all, if not in all, countries there are practitioners of medicine. Jagor, however, could find none amongst some of the tribes on the Philippine Islands, and von Rosenberg denies their existence in a tribe on the south-west coast of New Guinea; but it is quite possible that in both cases they were overlooked. Statements with regard to the absence of medicine men and the use of drugs in wild tribes must be accepted with reserve unless the reporter has lived with them. In the Andaman Islands there seems hardly any indication of a medical class, and often medical treatment is undertaken by the wife of the household. Amongst the old Peruvians, too, the old women acted, at least in the case of the common people, as their medical attendants, and in South Australia—in smaller ailments, at least—each one is his own physician; but these are exceptions. Almost everywhere we find medicine men. Sometimes, as in New Guinea, they are hardly differentiated from the other people. In most tribes, however, they form a distinct class, and often they hold a high position. Amongst the Dakota Indians they have the highest respect paid them, and they are the most influential people in the aboriginal tribes in Victoria and amongst the Ipurian Indians. In Samoa, however, they seem to occupy the highest position of all; in one place, at least, Turner found that an old medicine man was looked upon as the incarnation of a god. But this is no evidence that they are necessarily connected with the priesthood, although they deal largely with the supernatural.

"From what we can learn of the past, and what we can observe among uncivilised people of the present day, it seems probable that a knowledge of the influence of drugs on external or internal ailments has tended everywhere to accumulate in the hands of certain individuals—usually, perhaps, in those of the chief of the tribe, sometimes in those of his wife, but not infrequently other members became the special depositories of medical knowledge. Schmiedeberg suggests that such knowledge would first accumulate amongst herdsmen. Eventually differentiation of function occurred. Doubtless this was a gradual process and was accomplished in many ways. At times it may be that the priesthood took part in it, but there is no evidence that this was always or even often the case."

[Dr. Leech then dwelt on the connexion between medicine and the supernatural and traced the progress made by the healing art from the time of Hippocrates. He continued:]

"I think I have shown that the practice of medicine has arisen from observation and not superstition, but whether I have or not you who are entering the profession may rest assured that careful observation is the corner-stone of medical work. Above all things cultivate exactness in your observations. It is through want of exactness that more advance has not been made in medicine. Not a tithe of the drugs which have burdened the pharmacopœias of all ages,

including the present, would have been found in them if observation had been exact as to the value of remedies. Always keep in mind the well-known aphorism of Hippocrates: 'Experience is deceptive.' Mistrust your own observations at first and do not on too slight grounds assume they are correct. Confirm them by repetition. In much of your work in your student career you will find good opportunities for exercising yourself in exactness, and in none more so than when you are taking notes in the hospital wards. It is then that you have for the first time the opportunity of making observations in practical medicine for yourselves. Make good use of it. It is carelessness in observation in the wards which often leads to unsatisfactory results at a later period. I have told you to mistrust your own observations—equally mistrust those of others. Above all things beware of accepting hypotheses as facts. Many so-called laws are really only what are called working hypotheses—that is, theories which are put forth as possible truths, to be used in a tentative manner as guides to further experiments. Reasoning based on them has no firm foundation, yet they are often used.

"Although observation is such an important matter in medicine, yet for its progress much more is wanted. It is probable that the healing art had been cultivated, and with some care too, in Egypt for at least 3000 years before the Papyrus Ebers was compiled. But although this book contains much that is true and useful it indicates that but a slight advance in real knowledge had been made. This arose partly from the imperfect observations, but partly from the fact that the art of healing cannot advance far by simple observation of what does good in individual ailments—a knowledge of many collateral subjects is essential. You will not gain by devoting your attention as exclusively as you can do to what may be called the practical details of medicine, surgery, and midwifery. Physiology, chemistry, and pathology are not subjects merely to be slipped through with the idea that they are of no active service. The harder you work at them, and the more full your knowledge of them, the easier will you find what are often called the more advanced subjects, and the better medical men will you make. Neither as students in after life try to limit your acquisition of knowledge simply to the methods of cure, for if you do you will limit your knowledge of the methods of cure. Physics, chemistry, anatomy, and physiology will all stand you in good stead in the practical work of your profession. For the advancement of medicine they are absolutely essential. Do not treat these subjects as if they were to be acquired for examination simply, and to be forgotten as soon as possible. In your medical work, gentlemen, remember the injunctions of Hippocrates to watch the course of nature and bear in mind the necessity of always trying to find out the natural course of disease, that you may be the better able to treat it. How much misery would have been prevented if medical men of old had known that many conditions which they thought required the most energetic treatment would get well if left alone.

"Finally, gentlemen, remember the teaching of Hippocrates with regard to conduct: 400 years B.C. it was considered essential that a medical man should pass his life in purity and holiness; that he should respect the confidence of his patients, and that he should be careful of their feelings; that he should be ever on his guard lest what he prescribed should do harm; and that he should avoid all kinds of charlatanism. These and many other injunctions should press on you, living in the nineteenth century, even more strongly than on those who lived before our present era. Let me strongly urge you never to forget the teaching in this respect of the great Father of Medicine."

MASON COLLEGE, BIRMINGHAM.

INTRODUCTORY ADDRESS BY PROFESSOR PERCY FRANKLAND.

AN address was delivered at the opening of the Medical Session at Mason College, Birmingham, on Oct. 1st, by Professor Percy Frankland, F.R.S., on Pasteur and his Work: the Debt of Medicine to Chemistry—of which the following is an abstract:—

It may be said without exaggeration that there is no scientific name which is so universally known and in so many different connexions as is that of Pasteur. The chemist, physicist, biologist, and medical man each view Louis Pasteur as the author of some of the most important, novel, and fruitful departures in their several branches of knowledge, whilst in the worlds of industry and agriculture his influence has also been deeply felt and gratefully acknowledged. The first subject of research taken up by Pasteur at the early age of twenty-five was of such an abstract character that if his career had terminated with its completion the general world would have never known his name, and yet the initiated few would have been able to recognise one of the shrewdest scientific observers of this or any age. His strict mathematical and chemical training led Pasteur to be fascinated with the wonderful geometrical forms which are assumed by solids in what is generally called the crystalline state, and the particular phenomenon which attracted his attention was the existence of two tartaric acids apparently identical in chemical composition, in chemical properties, and in crystalline form, and, in fact, in all respects excepting alone that the solution of one had no effect on polarised light, whilst the solution of the other turned the plane of polarisation to the right. Submitting these crystals to the most searching scrutiny, Pasteur found that there were some minute faces on the crystals of the active tartrate which were absent from the crystals of the inactive tartrate, and such importance did he attribute to these little faces that he recognised that their presence relegated the substance possessing them to an entirely different class from that to which belonged the substance not possessing them. The crystals of the inactive tartaric acid which were destitute of these little surfaces he found were symmetrical, whilst the crystals of the optically active tartaric acid he found were unsymmetrical, or "dissymmetric," as he called it. His speculations, subsequently developed by Wislicenus, Le Bel, and Van't Hoff, led to the foundation of that most fascinating and fertile field of chemical science now known as stereo-chemistry, and prepared the way for some of the greatest achievements of modern chemistry, such as the artificial production of the natural sugars. Pasteur's genius was, however, not long to be retained in the exclusive service of abstract science. In the course of his experiments on the different kinds of tartaric acid he was led to try the effect of submitting them to fermentation processes, and he found that the two oppositely active tartaric acids are physiologically utterly distinct, one of them being capable of undergoing fermentation by means of bacteria, whilst the other remained untouched. This striking phenomenon has been largely utilised by later investigators for the preparation of new optically active chemical compounds. Pasteur was thus drawn by accident, as it were, from the inanimate world of pure chemistry into the vortex of the world of life, and it was to the study of vital phenomena that practically the whole of his genius and energies was subsequently devoted. The frontier line which Pasteur crossed from the domain of chemistry into that of biology was at the time very ill defined. The phenomena of fermentation which he had attacked were not generally regarded as vital phenomena at all, and it required years of patient labour before Pasteur was able to convince the scientific world of the truth of his statement that fermentation processes were the work of living microscopic organisms, and that each fermentation process was the work of distinct organisms. Knowledge and appreciation of these classical researches have meant wealth to the brewer, the distiller, and the wine-grower; and it is hardly an exaggeration to say that the brewer of to-day is able to stand the relentless taxation of the late Chancellor of the Exchequer as much through the labours of Pasteur, and those who have succeeded him, as through the unquenchable thirst of the British proletariat. Extensive as were Pasteur's researches in the domain of fermentation, there were processes which time did not permit him to investigate before he was hurried on into other fields of scientific interest and practical utility. His intuition, however, led him to recognise as a fermentation process the transformation known as nitrification, consisting in the conversion of ammonia into salts of nitric acid, which takes place on such an extensive scale in all the fertile soils of the earth. This process, from being regarded as a case of simple chemical oxidation, is now recognised as dependent upon the action of bacterial life, and the particular bacteria responsible for this action, after long eluding the search of the investigator, have during the last few years been isolated and described. In the course of these researches the astounding fact has been brought to light that in these nitrifying bacteria we have living cells which are capable of flourishing and multiplying in the entire absence of organic matter

Even still more important revelations in vegetable physiology have resulted from the careful study of bacteria in recent years, for it has been shown that certain green plants obtain the nitrogen which they require for their nutrition from atmospheric nitrogen by means of certain bacteria which infest their roots. These bacteria produce nodular excrescences on the roots, but when they are carefully excluded these root nodules do not make their appearance and the assimilation of free nitrogen ceases also. The lecturer then referred to the recent important researches of Winogradsky of St. Petersburg on this subject, which have shown that under suitable conditions certain bacteria can take up this free nitrogen without the presence of the green plant at all. The intimate contact in which Pasteur had lived with the microscopic forms of life during his researches on fermentation—the great importance of which was recognised by the French Academy already in 1859, when they awarded him the prize for experimental physiology—naturally led him to take a deep interest in the controversy which was then raging on the spontaneous generation of life. Into this contest he plunged, despite the urgent protestations of many of his scientific friends, who feared that nothing would come of his venture but the loss of valuable time. It is now, however, admitted on all sides that the settlement of this question of such transcendent importance was finally accomplished by Pasteur through experiments as remarkable for their extreme simplicity as for their clinching force.

Professor Percy Frankland then reviewed Pasteur's connexion with the foundation and development of the infant science of bacteriology and his contributions to our knowledge of infectious diseases. Soon after he had commenced to study the bacteria of particular diseases he was impressed by the fact that often in the course of cultivation in artificial media outside the body their virulence became diminished to such an extent that they ceased to be fatal on inoculation into susceptible animals; but the most important discovery in this connexion was that the animals inoculated with such enfeebled or attenuated cultures were found to have become protected from the disease, even when subsequently inoculated with most virulent cultures of the same organism. This discovery at once enlarged the scope of Pasteur's investigations, which now included not merely the study of infectious diseases and their exciting causes, but embraced also the artificial protection of the individual against their attack. The most varied methods were devised and elaborated for attenuating viruses of different kinds, and multitudes of domestic animals were protected from some of the most destructive plagues with which they are afflicted. Pasteur next proceeded to grapple with a disease affecting both man and animals—viz., hydrophobia. This problem was surrounded with special difficulties, over which, however, the genius of Pasteur triumphed, and the attenuated virus of hydrophobia was successfully prepared and by several different methods. As a testimony to the faith which experience has built up in the efficacy of the treatment, we find centres for carrying it on in almost every civilised country in the world, whilst at the Institut Pasteur in Paris it is carried out on an enormous scale.

The great problem of securing immunity from disease, which thus occupied the later years of Pasteur's activity, has, however, now entered upon an entirely new phase. For, whilst Pasteur's methods depended essentially upon submitting the individual to be protected to the attack of the disease-producing organism itself in a weakened condition, the new methods of conferring immunity do not involve any contact whatever between the individual and the virus in any shape or form. The initial step in this new method of treatment was the discovery that the artificial cultures of pathogenic bacteria may be entirely freed from the micro-organisms and yet produce their characteristic poisonous effects; the symptoms of a particular infectious disease can be obtained through the injection of the toxic or poisonous products elaborated outside the body by the particular micro-organism associated with that disease. By this discovery the toxines of diphtheria and of several other diseases have been rendered as specific poisons as are laudanum or the extract of nux vomica. It was further found that animals can be gradually accustomed to these specific toxines, and the question then arose as to how such animals which had undergone this gradual habituation to a particular toxine would behave on being subsequently inoculated with the disease-producing organism itself. It was found that such animals were able to withstand or were protected from the attacks of such virulent bacteria. This important step we owe to the labours of Salmon, Roux, Chamberland, and other investigators. The next step was the discovery that the blood of an animal thus artificially protected from a particular disease contained materials which can be transferred to other animals and which protect them also from the same disease. This astounding property of the blood serum of artificially immunised animals was first discovered by Richet and Héricourt, but to Behring and Kitasato is due the credit of having first shown in the case of diphtheria and tetanus that by means of such serum animals may be cured even after the disease has been actually contracted, provided the injection of the antitoxic serum is not postponed until too advanced a stage of the malady has been reached. Again, to Behring is due the merit of having extended these benefits in connexion with diphtheria to man himself. The lecturer then referred to a diagram showing the diphtheria death-rates per million living in the principal cities of the United Kingdom during the years 1883-92 and 1893 respectively. In commenting upon these statistics it was pointed out how in London the figures had risen from 300 in 1883-92 to 760 in 1893, whilst in West Ham, virtually a part of London, an increase from 250 to 420 deaths from diphtheria had also been recorded. As indicating the value, so far ascertained, of the serum treatment of diphtheria he quoted Kossel's recent figures giving the mortality from diphtheria in Germany before the introduction of the new treatment as 34·7 per cent. and since its application as 11·1 per cent. A fact of great importance to be observed in this new treatment of diphtheria is the circumstance that its efficiency is greatly dependent upon the time which elapses between the first manifestation of the disease and the application of the curative serum. The shorter the period which intervenes the better are the results obtained, and this condition applies equally to the treatment of other diseases, such as tetanus, by means of antitoxic serum, whilst it has also been established as a cardinal principle by Pasteur in his treatment of hydrophobia. So great is the demand for the therapeutic serum for diphtheria that its production is already a commercial undertaking of some magnitude in Germany, where coal-tar colour manufacturers with their numerous staffs of skilled chemists have still further enlarged their works by undertaking the elaboration of diphtheria antitoxic serum on a most extensive scale. The possibilities of securing protection by means of the serum of immunised animals extend even beyond the boundaries of infectious disease, for Calmette in France and Fraser in Edinburgh have been able to gradually accustom animals to larger and larger doses of snake venom, and have found the blood serum of such animals endowed with the power of protecting other animals into which the venom is injected. When we remember, said the lecturer, that 20,000 of our Indian fellow-subjects perish annually from snake-bites, and that the new method of treatment extends the prospect of saving many if not all of these, it is obvious that we are here again face to face with a subject of stupendous importance, and which affects us above all the other nations of Europe. In conclusion, Professor Percy Frankland pointed out the widespread influence which Pasteur had exercised upon the progress of science during the latter half of the present century, and that this extraordinary influence, wrought in so many different departments of science, must be attributed in the first instance to the possession of a singularly active, clear, and original mind, matured under the strict discipline of an arly training in mathematics and the exact sciences, which enabled him to submit biological phenomena to a rigid, logical, and uncompromising criticism such as they had never previously received. But even this rare combination of natural and educational endowments would have availed but little had there not been united to them an almost superhuman industry, an almost limitless capacity for work. It would be difficult also to find a better illustration of the manner in which one science can benefit from contact with another than that which is furnished by the results which have attended the digression of the specially trained chemist into the fields of biology and medicine. To Louis Pasteur belongs the glory of having set in motion that great medical revolution which has been well sketched by a modern French writer. "When man learnt how to protect himself from the wild beasts he made the first step in civilisation. To-day man is learning how to defend himself from microbes; it is a step of equal importance. A day will come

when in Berlin, in London, in Paris, man will not die of diphtheria, of typhoid fever, of scarlet fever, of cholera, or of tuberculosis any more than he dies in these cities to-day of the venom of snakes or of the tooth of wolves."

SPASMUS NUTANS, OR THE NODDING SPASM.

BY GEORGE DICKSON, M.D. EDIN.,
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THE following is a typical case of a somewhat rare disease — viz., spasmus nutans. The name "spasmus nutans" is somewhat misleading. Probably "spasmus oscillans" would be at once more descriptive and less confusing.

The patient, a boy aged one year, came under my care at Craiglockhart Poorhouse Hospital on Dec. 11th, 1893. No history was obtainable. On examination the child was found to be pale, but well nourished. There was only a slight appearance of rickets. There were two upper and two lower incisor teeth. The head was noticed to be constantly held inclined to the right side when the child was sitting up. In addition it shook from side to side in a way such as expresses dissent. The greatest excursion of the lateral movements was to the left, and there was a slight downward inclination, also to the left. The movements were not constant, but were induced or increased by excitement of any kind or by engaging the child's attention. Restraint of the movements caused marked discomfort. They entirely ceased during sleep and when the child was laid on his back. A day or two after admission horizontal nystagmus of the left eye was noticed. It also was only occasional, and was increased or induced by attempts at fixation, and markedly so by restraining the head movements. There was no impairment of vision or ocular movement, and the fundus oculi was healthy. The right pupil, however, was somewhat larger than the left. When looking at objects the child threw back his head, and, still keeping it inclined to one side, of necessity squinted at the object looked at instead of directing his gaze straight towards it. On Dec. 23rd the patient remained *in statu quo*. On Jan. 26th, 1894, the movements returned more markedly, and two teeth were observed to be cutting through the gums. On Jan. 29th there was slight return of nystagmus in the left eye, and slight nystagmus also of the right eye. About the middle of February another tooth cut through the gums and the nystagmus disappeared, the movements at the same time becoming less marked. On April 3rd the child to all appearance was quite well. In this case no treatment was adopted but the administration of cod-liver oil and attention to diet.

Since the above case came under my notice I have, through the kindness of Dr. John Thomson of Edinburgh, seen three others, and have been able from the books to collect full notes of twenty-three more, making twenty-seven in all. The literature on the subject is somewhat scanty. To Henoch of Berlin belongs the credit of having first drawn attention to the subject. In his text-book on Diseases of Children he gives in the first edition two cases and in the second edition four cases. In THE LANCET[1] Dr. Stephen Mackenzie gives two cases (Harveian Society Reports). In St. Bartholomew's Hospital Reports[2] two cases are recorded by Dr. Gee. In the Ophthalmic Society Reports[3] Mr. Nettleship records what appears to be an example of spasmus nutans. In THE LANCET[4] Dr. Hughlings Jackson mentions the affection in his address on the Relation of Ophthalmology to General Medicine, and suggests that it is akin to canine chorea. In the *Ophthalmic Review*[5] a case is quoted from Dr. Gordon Norrie of Copenhagen. The fullest account of the disease, however, will be found in THE LANCET,[6] in which the late Dr. Hadden gave full notes of five cases and an analysis of twelve. In St. Thomas's Hospital Reports for 1892 Dr. Hadden recorded nine other cases. Kassowitz, in an untranslated paper,[7] mentions spasmus nutans, classifying it among the nervous symptoms of rickets. The following five symptoms of the disease may be noticed: (1) head movements; (2) nystagmus; (3) petit mal; (4) strabismus; and (5) a peculiar way of looking at objects. The first two are by far the most constant. Both movements and nystagmus are present in about 90 per cent. of the cases, but at certain stages, or even throughout its entire course, the affection may be represented by only one of these. During incidence one—most frequently nystagmus—appears before the other, and during subsidence the nystagmus generally persists longest. The head movements are most commonly a combination of shaking and nodding. Pure lateral movement is very uncommon, and pure nodding extremely rare. In frequency the movements are about 20 per minute. They cease during sleep and when the child is placed on his back. They are increased or, if absent, excited by engaging the child's attention. They are not increased or induced by covering the eyes. Whether moving or not, the head is generally held inclined to one side, and there is generally greater excursion of the movement to one or other side. Restraint of the movements causes marked uneasiness. The nystagmus may be monocular or binocular, most commonly the latter. The nystagmic movements are very rapid, about 200 per minute. They are increased or induced by engaging the attention, and markedly so by laying the child on his back or by fixing the head. The nystagmus is only occasional, like the head movements. In direction it is most frequently horizontal, and only occasionally rotatory or vertical. Nystagmus of the eyelids sometimes occurs, and hippus has been noticed. With regard to petit mal, Dr. Hadden first drew attention to this fairly constant symptom. The child is simply observed to look vacant for a few seconds, and occasionally the head or the eyes, or both, deviate to one or other side. Strabismus is not nearly so common as the other symptoms. It may be constantly present or only occasionally. In some cases it is only noticed during an attack of petit mal. A peculiar way of looking at objects is nearly always observable. Dr. Hadden has happily described it as "looking out of the corners of the eyes." It is probably due to the head being held, when looking at objects, in that position in which its movements can best be restrained. The pupils are generally normal, but hippus has been noticed, and occasionally temporary inequality of the pupils has been observed. The fundus oculi is always normal and the vision perfect. The general health is nearly always good. The diagnosis is comparatively easy. Eclampsia nutans — the salaam convulsion—is only confusing in name. In this the whole upper part of the body participates in a forward movement which is distinctly paroxysmal. The movements of spasmodic torticollis resemble slightly those of spasmus nutans. Cases represented by nystagmus alone might be mistaken for other forms of nystagmus until the eyes were examined and no ocular defect discovered. The prognosis is always favourable. In any given case it would be safe to say that recovery will take place before the child is two years of age, and that in all probability it will take place very much earlier. It is not the forerunner of epilepsy, and the after intelligence of the child is in no way impaired. As to treatment, the affection has a natural tendency to recover without drugs. Bromides are recommended by Dr. Hadden, Dr. Thomson has found benefit from antipyrin, and Kassowitz recommends anti-rachitic treatment (phosphorus).

Remarks.—In considering the etiology of spasmus nutans it is evident that, while sex has probably no influence, age is a factor of the first importance. A comparison of the cases shows that 50 per cent. occurred between six and twelve months; 15 per cent. were under six and 15 per cent. over twelve months of age. The youngest was that recorded by Norrie, where the disease was noticed shortly after birth. Although Kassowitz looks upon the affection as due to rickets, this occurs in such a small proportion of the cases that it cannot be looked upon as more than an occasional predisposing cause. Convulsions, either as a personal or family tendency, are somewhat uncommon. Falls on the head are recorded in six or seven of the cases, the affection being noticed immediately afterwards. Dr. Hadden suggests that they may be more the result than the cause, being actually attacks of petit mal. It is possible also that anxious mothers, looking out after a fall for consequent mischief, have their attention first drawn to symptoms already existent. Dentition is,

[1] THE LANCET, May 1st, 1886.
[2] St. Bartholomew's Hospital Reports, vol. xxii., 1886, p. 96.
[3] Ophthalmic Society's Reports, 1887, p. 76.
[4] THE LANCET, Oct. 26th, 1889.
[5] The Ophthalmic Review, 1888, p. 355.
[6] THE LANCET, June 14th, 21st, and 28th, 1890.
[7] Wiener Medicinische Wochenschrift, 1893, U. 321.

without doubt, an important causative factor. The disease is one peculiar to the dentition period. Moreover, Dr. Thomson had a case where the symptoms began at three months, dentition also beginning at this abnormally early period. That it is not the only etiological factor involved is shown by the fact that the disease may appear when dentition is not active—e.g., two cases under one month. The nystagmus which occurs in coal-miners presents a somewhat curious analogy to spasmus nutans. In miner's nystagmus head movements occasionally occur in bad cases, and attacks of petit mal have been recorded.[8] The occurrence together of head and eye movements would point to a very intimate connexion between the cerebral centres presiding over these movements. This is further suggested by the close inter-relation which subsists between the two in a state of health, and by the compensatory action of either in certain paralytic conditions of the other—e.g., ophthalmoplegia externa. Moreover, it is well known that there is a special frontal centre presiding over the combined movement of head and eyes. In this connexion it is interesting to observe the almost invariable correspondence in direction of head-and-eye movements in spasmus nutans. Out of seventeen cases that can be compared this correspondence was present in fifteen. This includes one case where the nystagmus was vertical in one eye and horizontal in the other, the head movements being combined nodding and shaking, and a still more interesting and suggestive case where the nystagmus was generally horizontal, occasionally rotatory or vertical, and in which the head movements were usually shaking, but occasionally nodding. The disease is probably due to an instability of the ultimate elements of the brain substance in the region of the centre involved. This instability further evidences itself by the frequent occurrence of petit mal. Dentition must be looked upon as by far the commonest exciting cause, but it is probable that any other reflex irritation would—other things being equal—produce the same effect. In one of my cases, where there was no appearance of dentition, a probable reflex cause was a large irritable patch of eczema capitis, the cure of which was followed by subsidence of the symptoms. It must be remembered that about this period the whole nervous system is in a state of great irritability and instability, and it is scarcely surprising that the highly complicated mechanism involved in what are the first attempts at coördinated action tends to get out of gear from trivial causes.

I have to acknowledge my indebtedness to Dr. Edward Carmichael, visiting medical officer to the Edinburgh City Poorhouse, for much kindness in supplying me with literature and many valuable suggestions.

LAPAROTOMY IN TUBERCULOUS PERITONITIS.

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LAPAROTOMY and douching of the peritoneal cavity are proceedings too often described as "heroic," and are either never tried at all or only used as a last resource. One of the most striking cases of recovery I ever witnessed was that of a patient sent to Addenbrooke's Hospital under my care as suffering from obstruction of the bowel, vomiting and complete constipation being the prominent symptoms. It was judged to be a case of tuberculous peritonitis with many adhesions. The greatest success followed an operation in which purulent lymph and fluid were washed out of the abdominal cavity by free warm douches. There were many adhesions found, but no constricting band. A case quoted by Mr. Knaggs is similar.[1] As a more deliberate proceeding, and before the patient is in immediate danger, the operation may prove of great advantage. The following case is an example in which there existed disease in the chest, as well as most serious tuberculous peritonitis, with an unusual amount of fluid in the peritoneal cavity. Abdominal incision and washing out the peritoneal cavity gave excellent results.

A young woman aged nineteen years was sent for treatment under my care in Addenbrooke's Hospital by Mr. De Lisle in January, 1895, when it was noted that she had a good family history and had a healthy past life, not often ailing except for amenorrhœa and anæmia. During the past six months she had been invalided, and for the last three months had had a dry cough, with pain in the right side, which lasted three weeks and was followed by shortness of breath. The abdomen had gradually been growing bigger during about nine months. There was no blood spitting or night sweats. She was a fair girl with good teeth, but had been losing flesh lately. In the chest there were exaggerated breathing sounds on the left side. The right side was dull throughout, and breathing was diminished. There was no pectoriloquy. At the apex there was an occasional crepitus or crackle due to friction. There was no cough or expectoration. The abdomen was distended, bulging in the flanks. The dulness in the flanks extended half-way to the umbilicus, which varied with the position of the patient There was a fluid thrill. No tumour was felt and no friction was audible. Pain and tenderness were very slight. The bowels were regular. The catamenia were absent. The specific gravity of the urine was 1020, acid; it contained phosphates, with distinct albumin. At the end of January Dr. Latham kindly consulted with me about her condition. The lung signs were most serious, and the circumference of the abdomen at the umbilicus was thirty-five inches. The patient grew decidedly worse, the abdomen painfully tense, and on Feb. 12th an operation was performed under an anæsthetic. Through a median abdominal incision (three inches) fifteen pints of fluid were evacuated. There was no evident pus or lymph; the whole of the peritoneal lining of the abdomen and bowels within sight or touch was thickly studded with tubercles varying in size from a pin's head to a pea. The right ovary felt like a nutmeg grater; no smooth surface could be found anywhere in the abdominal or pelvic cavity. Warm boric douching was used, and the wound was closed with sutures and covered as after ovariotomy. It was examined on the twelfth day and found to be healed, the patient's condition having already improved. The temperature, which had been usually up to 100° F. in the evening, became uniformly normal from the date of the operation. A certain amount of fluid collected again, but the patient improved so far that she could leave the hospital on March 23rd. Mr. De Lisle wrote to me on June 29th as follows: "I have delayed answering your letter, waiting to see what the result of time, following your directions, would be in the case of the patient upon whom you operated. I am extremely pleased to be able to tell you that the result is eminently satisfactory. Up to May the fluid in the abdominal cavity did not seem to lessen, and I was afraid I should have to send her back to you. With the advent of the fine warm weather early in May a marked improvement took place; the fluid seemed rapidly to disappear, sweating ceased, the cough lessened, and she began to gain flesh and strength. She is now her normal size, has no cough, has walked as much as ten miles in a day, and has gained weight. In fact, she describes herself as feeling 'quite well.'" On Sept. 3rd her progress to recovery was complete. She was 10 st. 3 lb. in weight, there being no active lung symptoms. The size of the abdomen was normal. She did her work, walked, danced, and led the ordinary healthy life of a girl of her age full of vitality.

Mr. Holmes [2] gives the experience of St. George's Hospital in seven years as three operations of laparotomy for tuberculous peritonitis and two deaths. The fatal cases were complicated in one instance by a band constricting the bowels and in the other by pneumonia. There was in the case I have just related an improvement in the general health after my operation which permitted an arrest of activity in the abdominal disease. We must not expect that patients will be cured when all the cavities of the body are full of tubercle, but every chance should be given to surgical procedure as a most powerful remedial agent in tuberculous peritonitis. It will be, perhaps, found that a case with a large quantity of fluid is most suitable for laparotomy; but this may be only because the fluid collects more in the earlier stage of the disease and adhesions mat together the bowels in more advanced cases. By laparotomy the fluid is thoroughly drawn off, and the tension is relieved, and whether douching is more than accessory to drainage it is difficult to say. Certainly tapping the abdomen alone makes

[8] Oglesby: Brain, 1881, p. 160.
[1] Transactions of the Clinical Society of London, vol. xxi.
[2] Brit. Med. Jour., July 6th, 1895.

no such favourable impression on the disorder. Improvement in the general health may be expected to follow an operation, and so give a chance for the cure of other foci of tuberculous disease.

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A CASE OF IDIOPATHIC TETANUS FOLLOWING INFLUENZA; RECOVERY.

BY JAMES MILNER, L.R.C.P. EDIN., M.R.C.S. ENG.

FROM the fact that the percentage of recoveries from tetanus—either traumatic or idiopathic—is not large, and also from the existence of an unusual probable causation, the following case may be considered of some interest.

During the height of the influenza epidemic I was called, on the evening of Feb. 25th of this year, to see a man aged thirty-five years, with the usual symptoms of influenza, who had been complaining for several days. Upon asking the patient to protrude his tongue I noticed at the time—though I did not then put the correct interpretation upon the fact—that he opened his mouth with difficulty and did not separate his teeth more than just enough to show the tip of his tongue. Although he complained of stiffness of the jaws and neck, influenza seemed to be a sufficient explanation, and tetanus did not occur to me until I saw the patient by daylight on the following day (Feb. 26th), when the presence of a "risus" and the patient's statement that he had "striking" pains in his back and legs led me up to a suspicion of the true nature of the case, which became a certainty when upon the patient attempting to comply with my request that he should separate the teeth as far as possible a well-marked tetanic spasm took place. The case ran the usual course. The jaws became tightly closed, so that only fluids could be administered. The spasms increased in frequency and violence, although fortunately they were never of long duration, the most severe one witnessed by me not lasting more than sixty or seventy seconds in its full intensity. The abdominal surface was as hard as a board. The legs were rigid, and the arms slightly so, the right much more than the left, which was only very slightly affected. By March 1st the spasms had attained their full intensity, and remained extremely severe until the 10th, after which date they gradually declined. The complications (which gave no anxiety) were: (1) retention of urine on two or three occasions, but not so urgent or prolonged as to demand catheterism; (2) some redness and tenderness of the heels, evidently from pressure; and (3) a vesicular eruption confined to the back and sides of the neck. This latter I could not satisfactorily account for. There was at the same time a papular bromide rash over other parts of the body, but this very closely aggregated vesicular eruption (which here and there became pustular) was confined to the back and sides of the neck. The only sequela was an attack of subacute synovitis—probably rheumatic—in both knee-joints, which somewhat retarded recovery, but which fortunately did not appear until almost all tetanic spasm had departed. Briefly, the treatment consisted in the administration of bromide of potassium and morphia in quantities large enough to keep the spasms within tolerable limit, and in maintaining the strength as well as possible by suitable nourishment. The largest amount of bromide given was 180 grains (in divided doses), and of morphia 3 grains in a single dose at bed-time. These were the largest amounts of the drugs given in any one period of twenty-four hours, and only when the frequency and severity of the spasms had overcome smaller doses. As the violence of the spasms abated, the medicines were gradually diminished until March 24th, after which date all bromide was stopped, and salicylate of soda with ammonia was given for the rheumatism. An occasional opium pill had still to be administered at bed-time for the pain of the latter complaint, but nothing more was required for the tetanic spasm. On May 1st the patient was of course suffering from debility, and a joint ached occasionally; but he could walk a couple of miles without undue fatigue.

Remarks.—I have not seen influenza mentioned as a cause of tetanus, but from the absence—to my mind—of any other explanation I cannot help thinking that it was the etiological factor in this case. The weather had been unusually cold, but the low temperature had been continuous, and this is, I believe, acknowledged not to be nearly so potent in the causation of tetanus as sudden vaiations of temperature. The man had certainly been exposed to cold and damp, but so he had during the whole of his life, and he had never before been ill for a single day. There was no history of any injury, and a close search revealed no wound or even scratch of any kind.

Shipdham, Norfolk.

THE PREVENTION OF PUERPERAL FEVER.

BY J. MCNAMARA, M.D., B.CH., B.A.O. R.U.I.

I INCLUDE under the heading "puerperal fever" diseases of the puerperium which are represented in ordinary surgery by (1) pyæmia, (2) septic infection, and (3) septic intoxication. Septic intoxication in the puerperal state can generally be arrested by judicious douching, but the treatment of septic infection and pyæmia is all but hopeless. It is not, however, with the treatment of these grave conditions that I am now concerned, but with their prevention. This is a subject on which very little that is novel can be said. It is a subject which has been discussed again and again in the pages of the medical press, and my only excuse for bringing it forward once more is that, although puerperal fever is a preventable disease, it is not at all an uncommon one. In other words, every year and every month, through ignorance or through negligence, patients are invalided who should be well, or lives are lost which should be saved—a fact which, I venture to say, registrars and coroners might well take cognisance of in the interest of the community. "Whatever indulgence," said Oliver Wendell Holmes, "may be granted to those who have heretofore been the ignorant cause of so much misery, the time has come when the existence of a private pestilence in the sphere of a single physician (and, I would add, of a single midwife) should be looked upon not as a misfortune but a crime; and in the knowledge of such occurrences the duties of the practitioner to his profession should give way to his paramount obligations to society." If anyone should think that these words of the genial and kindly Holmes are characterised by undue asperity, I would ask him to place his own wife or his own daughter in the position of the patient and then picture to himself the ignorant or the negligent attendant hovering round the bedside with "death in his finger-nails."

To prove the value of the following plan for preventing puerperal fever I need only mention that in the course of some 300 deliveries in which I adopted this plan not one mother has died, not one has developed a septic symptom. Results like these are, I believe, unknown except in antiseptic midwifery. The first thing then, is to provide a supply of powders or tabloids, each containing ten grains of corrosive sublimate with ten grains of ammonium chloride. One of these powders or tabloids when added to a pint of water will make a solution of corrosive sublimate of about 1 in 1000. If the powders be used it will be found that in most of the ordinary waters which (like the London water) contain lime salts, the corrosive sublimate gets decomposed, the mercury is liberated, and the solution becomes opalescent. To prevent this the addition to the solution of a pinch of tartaric acid will suffice. Before examining the patient internally the hands should be well washed with soap and warm water and then kept in the corrosive sublimate solution for at least two or three minutes. It is commonly advised to make vigorous use of the nail-brush before washing the hands, but the average nail-brush in the average house is, I believe, more septic than most hands. I think, therefore, that the judicious use of a clean pocket-knife, followed by washing and disinfecting in the sublimate solution, more advisable. The hands should be left at least two or three minutes in the solution. It is true that a solution of corrosive sublimate of the strength of 1 in 1000 is capable in about fifteen seconds of killing or of rendering harmless the most virulent of the organisms which cause puerperal fever, but it is well to allow time for the solution to reach at least the superficial parts of the hair follicles and gland orifices of the skin. In making the internal examination the hands should be introduced directly from the solution without previous drying in probably septic towels. If a lubricant be required

carbolic oil (1 in 8) will give every satisfaction. The glycerine solution of corrosive sublimate, which has been frequently recommended as a lubricant, I find useless when the hands are wet, for the glycerine so mixes with the water as to lose its lubricating power. So much then for the hands, and now as regards the vulva. The vulva, from its warmth and from its moisture with organic fluids, is a veritable culture ground for micro-organisms. It should, therefore, be disinfected by being well mopped with the corrosive sublimate solution whenever it is necessary to introduce any instrument or the whole hand or more than one finger. I say more than one finger, for when, as in the ordinary examination, it is only necessary to introduce the index-finger, this can be so shielded by the other fingers as to be prevented from rubbing against the parts, and so saved from the danger of introducing septic matter. In ordinary cases, therefore, although it may be advisable, it is not necessary to disinfect the vulva. As regards the instruments, when these are needed I find that the best and most convenient way of disinfecting them is by boiling. There is no difficulty about this. An ordinary kettle or an ordinary pot, filled with water and boiling on a fire, is all that is required. Take, for instance, the forceps, which is the instrument most commonly required; the handle half can be first dipped into the kettle or pot and left to boil for four or five minutes; then, by holding a clean napkin in the hand, the instrument can be inverted and the blade half left to boil for four or five minutes more. Then the instrument can be removed, placed on a clean napkin, and when sufficiently cool lubricated on its convex surface with carbolic oil. While the instruments are being boiled the vulva can be disinfected. If a little of the corrosive sublimate solution be preserved and subsequently diluted to about 1 in 5000, it will be found of the highest value for cleansing the infant's eyes and thus warding off the danger of purulent ophthalmia.

I have now dealt with the hands, the vulva, and the instruments, and it only remains to say a few words on the advisableness of douching after delivery. When the whole hand or any instrument has been introduced into the uterus, or if during the week after delivery there should be any serious rise of temperature, I believe douching with a solution of corrosive sublimate (1 in 5000) advisable. In other cases I think douching should be dispensed with. Routine douching after delivery I believe to be bad practice. It is a little operation which has certain dangers and inconveniences of its own, and why should these be incurred when the patient is going on all right and when there is no reason to fear that she may not continue so? But whenever douching after delivery is thought advisable the medical man should do it himself and not leave it to a nurse, who will probably fail to introduce the tube into the uterus.

I will conclude by apologising for the small and apparently trivial details I have given. Although small, they are details on which momentous issues—issues of life and death—depend, and their adoption will, I am convinced, save others, as they have saved me, from that most painful of spectacles, that saddest of tragedies—the death of the patient through the fault of the attendant.

Milson-road, W.

DIFFICULTIES WITH THE ELECTRIC LIGHT IN BRISTOL.—Some inconvenience has been caused in Bristol by the uncertain character of the electric light and by its liability to sudden extinction at inconvenient times. On the afternoon of Sept. 23rd, whilst a cable was being tested, smoke issued from the manhole leading to a sub-station chamber under the pavement, and on the cover being removed flame and dense smoke arose, apparently due to the overheating of metal in contact with creasoted wood. The light was, however, supplied in the evening as usual.

PROSECUTION UNDER THE PUBLIC HEALTH ACT.—At the petty sessions held at Thorpe on Sept. 23rd a woman was fined the mitigated penalty of £3 for having on Aug. 9th removed her daughter aged thirteen years, who was suffering from diphtheria, from Clacton to Colchester by railway, the alternative in default of distress being twenty-one days' imprisonment. The defendant, who is in humble circumstances, argued that the illness was quinsy and not diphtheria; but Mr. T. G. Wakeling of Clacton, who had been in attendance on the case, and Dr. J. W. Cook, medical officer of health of Clacton, proved that the patient suffered from diphtheria, and that they had warned both her employer and the defendant that she was not to be removed.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Procemium.

LONDON HOSPITAL.

A CASE OF DOUBLE PHLEGMASIA ALBA DOLENS IN A YOUNG VIRGIN, HEALTHY EXCEPT FOR SLIGHT ANÆMIA.

(Under the care of Dr. HERMAN.)

CASES of extensive thrombosis are not frequently seen in the wards of our hospitals, and the description of the following case will be read with profit by many engaged in the study of medicine. It is difficult to account for the occurrence of such an extensive clotting as was undoubtedly present here, where but for a slight amount of anæmia the patient was apparently in good health. Dr. Vaquez[1] of Paris believed that "white leg" is but the second stage of a complication of infectious nature. The first stage, from a clinical point of view, is characterised by pain, elevation of temperature, and transitory œdema, the latter being especially prominent in cases in which the pain is so acute as to be called neuralgic; from a pathological standpoint, by the formation of a thrombus in the vein; and from a bacteriological standpoint, by the detection of the infectious agent, which most often is the staphylococcus. We think it is rare to meet with thrombosis of veins of obscure origin in young women who do not present evidences of anæmia. For the notes of the case we are indebted to Mr. W. Penberthy, resident accoucheur.

A young woman aged twenty, single, was admitted into the London Hospital, under the care of Dr. Herman, on Nov. 1st, 1891, complaining of pain and swelling of the left thigh, leg, and foot. She stated that she had menstruated regularly every month, having last been unwell three weeks before admission; until now she had always had good health. A fortnight before admission she was attacked by pain in the back and extending down the back of the left thigh. This pain was so severe that she had to go to bed. A week before admission the pain ceased, but the limb began to swell rapidly, attaining its maximum size in twenty-four hours. On Nov. 2nd the left thigh was greatly swollen, measuring 26½ in. round at its upper part, the right at the same level measuring 20½ in.; the leg and foot were also swollen, but not so much in proportion as the thigh. The limb was hot and tender to the touch. No thrombosed veins could be distinguished. There was no pitting on pressure of the thigh, nor did serum exude on pricking it, but the foot both pitted and exuded serum when pricked. The left labium was also swollen, and there was some tenderness on pressure over the left iliac region, though nothing abnormal could be felt. The patient was a well-nourished, healthy-looking girl, slightly anæmic. The heart and lungs were sound. The urine was acid and contained no albumin or sugar. The temperature was 102° F. The blood contained 50 per cent. red corpuscles and 46 per cent. hæmoglobin; the white corpuscles were in about the normal proportion. Under treatment the condition at once began to improve, the limb becoming less painful and tender, pitting on pressure, and gradually diminishing in size. On the 10th the temperature became normal. The left limb went on uninterruptedly to recovery. On the 15th the temperature rose to 100°, and to a degree higher the next day, when it was noticed that the right thigh was beginning to swell. On the morning of the 17th the circumference of the right thigh was 26 in. at the place where it had previously measured 20½ in. Subsequently followed swelling of the right labium, leg, and foot, and tenderness on pressure over the right iliac region, and after a few days gradual diminution of the symptoms set in. No distinct thickening of superficial veins could be felt. On Dec. 16th Dr. Herman made a vaginal examination, and found the

[1] Sajous: Annual of the Universal Medical Sciences, vol. iii. 1895, p. 14.

uterus movable but not enlarged; there was no parametric swelling, and nothing abnormal could be detected. There was nothing in the condition of the genital organs to suggest the slightest doubt of the patient's virginity. Dr. Stephen Mackenzie saw the patient with Dr. Herman, but found no disease other than that which has been described. The patient was discharged on Jan. 4th, 1892. She returned on Feb. 9th because the swelling of the legs had recurred, though not to the same extent as before. She was admitted and remained in the hospital till May 7th. The œdema went away, and the legs ceased to ache when the patient was recumbent, but they never returned to what had been their size before the illness; some solid œdema remained. Elastic bandaging was used, but the greatest effect on the pain and swelling seemed to be obtained by enveloping the limb in Scott's dressing. In spite of all treatment the legs remained much thicker than before the illness, and the patient could not stand or walk long without their aching and becoming œdematous.

Remarks by Dr. HERMAN.—The above case is published because it is one of extreme rarity, which, by its exceptional features, negatives some ill-founded theories as to the nature of the disease. Every student knows that phlegmasia alba dolens is usually a puerperal disease. But it is not common even after parturition; and not every case of swelling of the leg or legs in puerperal women presents the non-pitting œdema and other characteristic features of phlegmasia dolens. Some think that it is due to septic poisoning or to some blood poison gaining access by means of injury to the genital canal during delivery. This view I do not think in accordance with facts. Next in frequency to the puerperal state as recognised causes of white leg come the cachexias associated with advanced cancerous or tuberculous disease. In this case all the characteristic features of phlegmasia alba dolens were well marked, although the patient was a young virgin, healthy in every respect except for a slight degree of anæmia; there had been no opportunity for septic or any other wound infection.

ANCOATS HOSPITAL, MANCHESTER.

TWO CASES OF RECTAL CARCINOMA; PRELIMINARY COLOTOMY IN ONE; EXCISION; RECOVERY.

(Under the care of Mr. E. STANMORE BISHOP.)

DURING the last twelve months three cases of rectal stricture have been treated in Mr. Bishop's wards: one, a case of simple stricture, by dilatation; the other two (due to carcinoma) in the one case by partial and in the other by total excision of the rectum. All three cases ended in recovery. The two latter are given in detail. They represent two of the modern methods of operation for cancer of the rectum. In both recovery followed, and it is probable that the result attained in these cases is more frequent than it was a few years ago. Some published statistics[1] on this subject are of interest. It appears that during thirteen years there were 109 cases of cancer of the rectum operated on in the wards under the care of Czerny. In ten cases death followed the operation. Of the remaining patients 21 per cent. lived two years, 15 per cent. three years, 13 per cent. four years, and 8 per cent. five years, while four others were living more than six, eight, eleven, and thirteen years after the operation. Forty patients had survived the usual three years' limit. Thirty-six cases were subjected to the sacral operation, and the rest to the perineal method. The second patient was unusually young for the presence of cancer, but in this situation it has occasionally manifested itself at a very early age. There was recently a case of advanced carcinoma of the rectum under treatment in one of the London hospitals in a girl aged fifteen years.

CASE 1.—A man aged fifty-eight years was admitted to the hospital on Aug. 18th, 1894. Nine months previously he had been admitted with a rectal polypus diagnosed as adenoma springing from the anterior wall about two inches above the anus. It was sessile. The rectum was dilated, and the polypus with its base was excised by an incision semi-circularly in front of the anus, the mucous membrane being separated and drawn down. In view of the close connexion between simple adenoma and malignant adeno-carcinoma in this region the patient had been placed under Dr. Carne Ross's treatment, and three months later examination showed an apparently perfect result, everything being smooth and flexible. He returned to work on May 1st, 1894. On re-entering the hospital he stated that he had been quite well and working until five or six weeks before, when he noticed that he was passing blood with his fæces, and that during the last three weeks there had been discharges of blood and mucus apart from defecation. There was no pain, but very frequent action of the bowel. On examination per rectum a hard mass was felt anteriorly, blocking the rectum and bleeding when touched. The surface was rugged. It extended for about one inch in a vertical direction about two inches above the anus, but its upper extremity was within reach of the finger. Below and above it the mucous membrane was smooth and elastic. On Aug. 21st the rectum was split posteriorly by an incision reaching to the tip of the coccyx. The growth was then removed by scissors and the wound was packed with gauze around a large rubber tube. This was changed on the fourth day. On Sept. 8th the wound was granulating well. There were incontinence of fæces and some diarrhœa. On the 14th all had healed. The mucous membrane was smooth as far as the finger could reach, except for a slight puckering in front and to the left side. He was again placed under Dr. Carne Ross's treatment. On Oct. 2nd the line of internal scar, though smooth, presented three nodules, which felt hard. There was no bleeding on examination. Defecation was easy, but there was still some incontinence of fæces, and the bowels were loose. The temperature reached 99·6° F. on the evening of the day after operation, but fell to normal the next day and continued so throughout. On Jan. 13th, 1895, the patient, who, feeling very well, had neglected to follow out Dr. Ross's treatment, returned, having noticed blood in his stools. On examination a hard patch was felt on the left side, about three inches from the anus, one inch and a half wide and one inch in vertical measurement, movable, bleeding on touch, and ulcerated on the surface. On the 15th, the sphincter being dilated, the mass was removed with scissors, together with a wide margin of healthy mucous membrane. Its base was not adherent and came away easily. There was very free hæmorrhage, and also there was some collapse during the operation, so forceps were left on all visible bleeding points, and the cavity left was plugged with gauze. He required the catheter for thirty-six hours, when the bladder acted naturally. There was some bloody oozing. The forceps and plugs were removed in forty-eight hours. The temperature reached 101° on the 16th. After this boracic irrigation was practised daily. On the 31st several large furuncles showed on the hip and thigh. These were incised, and the temperature, which had risen to 103·4°, fell to normal. On Feb. 10th the cavity had filled up and healed. The finger only felt a smooth ring of cicatrisation on the line of removal. There was no thickening or hardness anywhere. He was discharged well on Feb. 22nd. On Aug. 17th his wife reported that he was again at work, feeling well and gaining flesh. The incontinence of fæces was much less.

CASE 2.—A young man aged twenty years was admitted to the hospital on Nov. 30th, 1894. He had been sent to hospital twice complaining of the passage per rectum of blood and mucus, and of frequent and imperative defecation. He said that after a short preliminary rumbling in the abdomen the bowels would act very suddenly, expelling blood and mucus. Up to February, 1894, he had been perfectly well. His mother was living, aged fifty-two, as well as his father, aged fifty. One sister was dead, from a cause unknown. Two sisters and one brother were living and well. There was no family history of syphilis or carcinoma, and no personal history or evidence of syphilis. He had been treated for the latter. On examination per rectum there was found, one and a half inches from the anus, a stricture fully one inch long, hard, gristly, with nodulated opening, and admitting the little finger with difficulty. The lower segment of the rectum was healthy. He had passed blood last on Nov. 28th. On Dec. 3rd it was noted that the bowels had been moved daily since admission, without blood, the stools being of the thickness of the little finger and broken. On the 14th the rectum was dilated under chloroform. The stricture showed a reddened, nodular, crescentic rim projecting into the lumen of the gut. A small piece was removed for examination and under the microscope showed the structure of an adeno-carcinoma. On the 21st inguinal colotomy was performed. As there was much abdominal distension

[1] Lövinsohn: Sajous' Annual of the Universal Medical Sciences, 1894, vol. iii., E 10.

the gut was immediately opened and a large rubber tube passed upwards, which was stitched to the small opening made in the bowel. There was a large passage through this of thin fæces, followed by subsidence of the abdomen. On the 23rd the tube was removed and the surplus gut cut away. The edges were stitched to the skin by continuous silk sutures and painted with Whitehead's solution of iodoform. There was some passage of fæces per anum. He slept well and took milk diet freely. On the night of the 28th the temperature was 103·4° F. and 100·4° on the following morning. An ulcer had formed at the upper end of the colotomy wound and was touched with nitrate of silver. The temperature became normal on Dec. 31st and had remained so up to Jan. 8th, 1895, on which day Kraske's operation for excision of the rectum was performed. The rectal growth had greatly extended, and had so blocked the lumen of the gut that the finger could not now be passed. The coccyx and about an inch and a half of the left half of the sacrum were removed—in all, about three inches of bone. There was great difficulty in dissecting the mass free in front from the bladder and behind from the sacrum, to both of which it was closely adherent. When loose all round it was clamped above by two large pairs of angled forceps and cut away below. This was done partly because the patient was by this time suffering greatly from shock, and partly because the separation had to be carried so high that it was doubtful whether hæmorrhage could be sufficiently quickly controlled by any other means. The anus and healthy mucous membrane below had previously been separated, with the idea of uniting them to the upper part of the rectum after removal of the diseased portion, but the amount removed—about five inches—rendered this impossible. During the dissection the peritoneum was opened and closed by a stitch. The large cavity produced, the size of a child's head, was packed with iodoform gauze. The temperature rose on the 9th to 100·6°, on the 10th to 101·4°, and reached 102° on the evening of the 14th, after which it slowly fell. The forceps were removed on the 10th. On the 17th the cavity was found to be covered with pinkish granulations. There was much difficulty in keeping the wound free from fæces, although the inguinal opening acted well, and the upper end of the lower segment of the bowel was plugged with gauze. The patient looked hectic, but was taking food well. The sister of the ward, Sister Robinson, deserves great credit for the care she took to ensure the thorough cleanliness of the wound, which necessitated frequent irrigation and most constant attention. On Feb. 3rd the patient was much emaciated, but the cavity was contracting well and now measured 5 in. by 3 in. and in parts by 1½ in. The surfaces and edges were lined by healthy granulations. The fæces still passed through the wound in diminishing quantities. It was dressed with boric glyceride. Urination had never given any trouble. On the 17th the sacral wound was found to be steadily contracting. The hip on the left side appeared to have fallen in slightly. Fæces still passed in spite of the gauze plug. On the 24th the fæces had ceased to pass through the sacral wound, which felt perfectly smooth and was closing up rapidly. The patient was greatly emaciated. There was no enlargement of the liver or the spleen. On March 12th the patient's weight was 8st. 6½lb., and on the 23rd 9st. 1lb. On the latter date the wound was one inch long and looked perfectly healthy. There was much prolapse of the mucous membrane in the colotomy opening. On the 29th, as the patient was greatly improved in condition, the mucous membrane of the bowel was divided transversely a little below the centre of the colotomy wound, stripped up from the interior of the lower segment for nearly three inches, and removed. The muscular wall of the gut was then stitched together with silkworm gut, and the remaining mucous membrane was united to the skin around, a small drainage-tube being left. There was some pain for two hours, followed by "jumping" pains at intervals for two days. The drainage-tube was removed on April 1st. The temperature had risen to 102° on March 30th. On April 4th there was no pain, except some aching on movement. There was no pain on defecation. The temperature had come down steadily to normal since March 30th. A small slough and three stitches were removed. On the 28th the patient was found to have steadily improved. The posterior wound was quite dry but not yet closed. The colotomy wound had almost healed. His weight was 9st. 6¼lb., and on May 1st it was 9st. 6½lb. The finger when passed per anum touched a pinhole opening by the side of the sacrum. There was no cavity beyond. The surface was puckered but smooth. The mucous membrane of the colotomy wound still prolapsed a little. The bowels acted well, but there was no control over their action. The patient was very useful in the ward. On Aug. 23rd there was no sign of recurrence. All had soundly healed.

Reviews and Notices of Books.

Surgical Pathology and Therapeutics. By JOHN COLLINS WARREN, M.D., Professor of Surgery in Harvard University. London: F. J. Rebman and Co. 1895. pp. 832. Price 42*s*.

FEW indications show more clearly the immense advances in pathology made within the last few years than the space assigned to bacteria in the ordinary text-books. Up to a comparatively recent date treatises on surgical pathology devoted only a few pages to the consideration of micro-organisms and their effects upon the body. The space thus employed has steadily increased, and now in many works the chapters devoted to these subjects form no inconsiderable portion of the whole volume. Dr. Warren gives two chapters (seventy-eight pages in all) to bacteriology. In the first he describes bacteria in general, and in the second he considers those which are of special importance to the surgeon. Descriptions are given of the various methods employed for studying bacteria, and coloured illustrations of tube-cultures and coverslip preparations accompany the accounts of the several micro-organisms. Succeeding chapters are devoted to simple and infective inflammation and the process of repair. The question of the possibility of pus arising apart from the influence of bacteria is discussed, and the conclusion arrived at is that though it is possible for pus to arise without bacteria, such an occurrence is extremely rare. Chapters follow on the ordinary "surgical" diseases, and in one respect this book differs from the majority of works on this subject. Usually the question of treatment is left out of consideration in treatises on surgical pathology, but Dr. Warren has attempted, as he tells us in the preface, to associate pathological conditions as closely as possible with the symptoms and treatment. Certainly there are advantages in considering the pathology and treatment together, for all modern treatment depends on our knowledge of the pathology. The work is well up to date. As a proof of this we may instance the description of the employment of tetanus antitoxin and the discussion as to the presence of micro-organisms in carcinoma. Very few errors seem to be present. It is, however, certainly a mistake to connect rachitis by derivation with ῥάχις; and on page 599, by a misprint, gluten appears to be a constituent of bone. We must praise the illustrations, some of which are in colours and many tinted, though often the tinting is more ornamental than useful. The printing and paper are excellent, and a good index is supplied. The whole work has been very carefully written and is a worthy representative of American pathology.

The Anatomy of the Nasal Cavity and its Accessory Sinuses: an Atlas for Practitioners and Students. By Dr. A. ONODI, Lecturer on Rhino-Laryngology in the University of Budapest; translated from the second edition by ST. CLAIR THOMSON, M.D., M.R.C.P. Lond., F.R.C.S. Eng. 1895. London: H. K. Lewis.

IN 1893 Dr. Onodi of Budapest published an atlas of twelve plates prepared from a series of sections showing the topographical relations of the nasal cavity and its accessory sinuses, especially with regard to the neighbouring organs, such as the eye and the ear. In the next year another

edition was called for, and four new plates were added. It is this second edition which has been translated by Dr. St. Clair Thomson. We may at once say that the engravings are most accurate and reach a high standard of excellence. They show sagittal, coronal, and horizontal sections and give a thorough idea of the anatomy of the nose, and the explanation of the individual plates is quite adequate. In a general introduction an account is given of the nasal walls and cavities, which is very clear and accurate, except that in describing the outer wall the lacrymal bone is omitted, although it is figured in the first plate. Although intended for practitioners and students, most of the sections really illustrate important relations which must always be present to operators, whether general surgeons or specialists, who have to deal with diseases of the nose and to whom an accurate knowledge of its topograpical anatomy is imperative.

La Pratique des Opérations Nouvelles en Chirurgie. Par A. GUILLEMAIN, Prosecteur à la Faculté de Médecine de Paris. Paris: Baillière et Fils. 1895. pp. 334.

IT is always a difficult matter for a text-book on general surgery to keep up with the rapid advance of the science. It is more than difficult—it is impossible. The successive editions of a text-book can appear only at distant intervals, and, moreover, it often happens that even while the book is in the press some part of it is out of date. The little volume before us supplies a decided want. It affords us that information about recent advances in operative surgery for which we might search in vain in any treatise on surgery published before the present year. We know of no such book in English. The work deals with the surgery of all parts of the body, but as greater activity has been manifested recently in abdominal operations, naturally these receive rather more attention than might otherwise be accorded to them. In this connexion we may mention that a good account is given of Murphy's button. The descriptions given are sufficiently explicit to enable a surgeon to perform the operations, but from the size of the book the accounts must be necessarily brief. Numerous references are given to papers and articles, but, as we might expect, they are for the most part French. Many illustrations are present and assist the text.

Poisons: their Effects and Detection. By ALEXANDER WYNTER BLYTH, M.R.C.S., F.I.C., F.C.S., Barrister-at-Law. Third Edition, revised and enlarged, with tables and illustrations. London: Charles Griffin and Co., Ltd. 1895.

A REVISED and enlarged edition of Mr. Wynter Blyth's "Poisons" might have been easily anticipated as soon as it was known what a valuable contribution on the subject he had placed at the disposal of the toxicologist and others some years ago. We are glad to find that the same general plan of the original has been preserved in the present edition; but, of course, to be in accordance with the enormous developments which recent investigation has been productive of, and of the ever-widening field which the constant addition of new toxic substances is opening to view, a great part of it has been re-written, enlarged, and corrected. Not less during the same period has been the advance in analytical methods of detecting poisons; old processes have consequently made way for new and—as experience has shown—more accurate ones. We like the plan and arrangement of this work, and the classification adopted makes the task of reference light. The introductory chapter on "The Old Poison Lore" is full of interesting historical reading, and is followed by a short but very instructive section on the connexion existing between the chemical structure of the molecule of organic substances and physiological effects; but the results obtained are, as it is observed, "too fragmentary to justify any great generalisation." In the succeeding chapter on life tests we venture to think that an error of judgment has been made. The author has purposely omitted to describe, as was the case in former editions, the manner of applying life tests because "the Vivisection Act effectually precludes the use of life tests in England save in licensed institutions." Nevertheless, a description of biological methods might have been retained, we think, for the benefit of those authorised to experiment upon animals for this purpose, while students and others should, at any rate, be acquainted with the way these things are done if they are not permitted to do them. This observation is also surely justified, since the effect of injecting animals with various poisons is fully described elsewhere, under the heading of "Action upon Animals," in the sections in which the poisons are separately discussed. The chapter on the cadaveric alkaloids or ptomaines or toxines is short, and they are, perhaps, not treated at that length which the increasing importance of the part these bodies are taking in disease and as poisonous agencies occurring sometimes in food, &c., demands. It is, however, thoroughly practical, and the work is essentially one for the searching analyst.

In regard to those ptomaines in particular which are said to have been isolated and crystallised from the urine of patients suffering from various diseases we must express ourselves in full accord with the author's remarks when he says that "to specifically declare that a few milligrammes of a substance is a new body requires immense experience and great skill, and even when those qualifications are present this is too often impossible, and, this being so, the long list of named ptomaines, such as erysipeline, varioline, and others, must have their existence more fully confirmed by more than one observer before they can be accepted as separate entities." The processes that have been described for the isolation of these products have appeared to us to offer no great difficulty of manipulation or experiment, and we wonder that other observers have not been induced to repeat the experiments, with a view of confirming or disproving the results affirmed to have been obtained. It is hardly necessary to speak in terms of praise of Mr. Wynter Blyth's work, as we know it is valued and largely trusted. We welcome the fact that it has recently been harmonised with modern advance. The excellent practical directions laid down are doubtless largely dictated by the result of experience and if carefully and intelligibly followed should leave no uneasy doubt in the analyst's mind as to whether he has missed what he is searching for, or whether or not to accept the indications of negative reactions. As a practical guide to the detection of poisons we know no better work of reference.

LIBRARY TABLE.

The Brewing of Non-Excisable Beers. By. J. POCOCK. Bangor. 1895.—The aim of this little work is to point out the principles upon which all non-excisable fermented beverages should be made, and to impart to those who do not know a knowledge of the processes which otherwise they blindly superintend. In this the author has succeeded fairly well; he has written some intelligible chapters on fermentation, the selection of yeast, the use of preservatives, &c., each of which should amply repay the perusal of the aspiring non-excisable brewer. We commend this little book because its object is to rescue an important branch of manufacture from the practice of haphazard processes, and to place the general production of non-excisable and wholesome beverages upon a more scientific and satisfactory basis.

Chemical Laboratory Labels. Part 2. Compiled by W. H. SYMONS, F.I.C. Published by A. Gallenkamp and Co.,

2, 4, and 6, Cross-street, Finsbury, London. 1894.—We have received a copy of Part 2 of this really useful collection of labels for the laboratory. The nomenclature is "up to date," and the addition of the formula and formula weight of the substance indicated is an obviously convenient one. The labels include a table of atomic weights and a print of Lothar Meyer's grouping of the elements, which, when fixed on a bottle or cylinder of such a diameter that both ends will meet, exhibits the elements periodically arranged on a spiral.

Introduction to the Study of Biology. By B. LINDSAY. London: Swan Sonnenschein and Co. 1895. 6*s*.—As an introduction to the study of zoology this book will doubtless soon become popular among students commencing the science, as it is especially written with a desire to meet the difficulties and requirements of beginners. The first part of the book deals with the general principles of biology. In an elementary work of this kind it would, of course, be impossible to go very far into such extensive questions as embryology, distribution of animal life, origin of species, and so on; but the author has succeeded in making an interesting and readable sketch of these principles, after the perusal of which those requiring deeper knowledge will the more easily understand larger works. The second part of the book is systematic, and consists of a classification of the animal kingdom, with the salient features of the different classes clearly pointed out and illustrated by numerous diagrams. There is a chapter which advises the student concerning his practical work, and also points out the chief standard works. Last, but not least, there is a glossary of the scientific words used in the book in which their derivations and meanings are fully given.

The Origin of Plant Structures by Self-adaptation to the Environment. By the Rev. GEORGE HENSLOW, M.A., F.L.S., F.G.S. London: Kegan Paul, Trench, Trübner, and Co., Limited. 1895.—The author considers that the origin of species depends chiefly on the environment and much less on natural selection than supposed by Darwin. The answer to the question, "What, if any, aid does natural selection supply in the origin of species?" depends upon the question as to whether the environment induces indiscriminate or, as Darwin called them, "indefinite" variations, and the author's reply is that a new environment does not, in any sense of the term, "select" at all, but *itself induces a plant to form definite*, and not indefinite, variations in nature; and, lastly, that definite variations are *always* in the direction of adaptation to the environment itself. The author then gives a concise epitome of the facts by which he hopes to make clear that the origin of species in plants is solely due to the direct action of the environment, and that Darwin, although fully recognising this principle, thought it to be exceptional, instead of its being the rule, in nature. The introductory chapter deals very fully with all the above-mentioned views, and contains a great deal of information bearing on the subject derived from many sources. The peculiarities of desert plants, alpine and arctic, maritime and saline, and phanerogamous aquatic plants are then successively and fully dealt with, and there are chapters on the origin of subterranean structures (roots and stems), peculiarities of climbing stems, and form and structure of leaves. With regard to the relations between roots and stems the author emphasises the fact that as a rule their differences are due to the direct results of the aerial and subterranean conditions of their normal existence, and experiments prove that when normally aerial stems are made to grow underground the new growth *at once* begins to assume the characters of normally subterranean stems such as rhizomes, and that both are in many ways comparable to roots. The conclusion therefore drawn is that it is the aërial and subterranean environments which act directly upon the responsive power of the organ, which then develops the structure appropriate for each medium respectively. Many interesting facts and theories are given about climbing plants, and the book altogether is most interesting and will be an addition to the International Scientific Series with which it is associated.

The Playground of Europe. By LESLIE STEPHEN. New edition. London: Longmans, Green, and Co. 1894. Price 6*s*.—The hazardous joys of Alpine climbing have seldom had a more competent exponent than the author of this entertaining work. In the vivacity and charm of his literary style he is excelled by few, and it is now more than thirty years since he made himself a name among the adventurous athletes who delight in scaling the mountain peaks of Switzerland and Savoy. "Excelsior" is the appropriate though quaintly expressed maxim of these enthusiasts. They have no mind to linger long in peaceful valleys or by the lake sides, but seek enjoyment rather in climbing precipices 1000 feet high or in tempting fate, tied three or four together to a rope, in situations inaccessible to a chamois. Such lovers of nature in her wilder aspects will not fail to relish the scene depicted in the frontispiece—an incident in the author's ascent of the Rothhorn in 1864, which he describes at page 110 as "the nastiest piece of climbing I had ever accomplished." It is not everyone who can attain either membership of the Alpine Club or Mr. Leslie Stephen's eminence in the higher departments of literary work; but to all admirers of perilous exploits among some of the grandest scenery in the world this record of his mountaineering achievements will be welcome.

Brain: a Journal of Neurology. London: Macmillan and Co. Summer and Autumn Numbers. 1895.—This last double number of *Brain* is one of very great interest. Amongst the original articles there is the address of Sir William Broadbent, as President of the Neurological Society, on the subject of "Brain Origin," while numerous papers of considerable scientific and clinical interest are contributed by Dr. Waller, Professor Wright, Dr. Michell Clarke, and others, together with an interesting discussion of the late Dr. Hack Tuke's important paper on Imperative Ideas. There is also a critical digest of recent psycho-physical literature and several reviews and abstracts. With such contents it is evident that this important publication at least keeps up its reputation. But we may suggest that it would conduce to the comfort and convenience of readers if the numbers were issued separately in their respective quarters, rather than that two should be issued together. The double number before us is a book of 287 pages.

NEW INFIRMARY AT SOUTHPORT.—On Thursday, the 26th ult., Southport began a series of celebrations which extended over the rest of the week by the public opening of the new infirmary. On the next day a marine drive and a bridge crossing the channel between the two marine lakes were dedicated to the public, and Saturday was given up to a brass band contest—a species of entertainment popular in Lancashire. In addition to the gift of five acres of land, valued at £5000, by the beneficiaries of the Scarisbrick Trustees, £25,800 have been sent on the infirmary. The building is of brick and stone and the front aspect is that of a quadrangle, with the men's wards on one side, the women's wards on the other, the administrative block in the centre, while behind are the children's ward, the laundry, and other buildings. There will be beds for sixty patients, and the nursing staff and servants will number about thirty. The extensive area round the hospital is laid out as pleasure grounds. The opening ceremony was performed by Alderman Dr. Wood, who is now mayor of Southport for the fourth time. He gave an interesting sketch of the growth from very small beginnings of the provision made for the sick in Southport. The Strangers' Charity was founded in 1806, and for fifteen or sixteen years the work was carried on in one or two hired rooms. "That," said Dr. Wood, "was the germ from which had sprung the convalescent hospital, the dispensary, and the infirmary."

New Inventions.

A NEW FORM OF POCKET CASE.

MESSRS. MAW, SON, AND THOMPSON, of Aldersgate-street, have made for me a small "compactum" waistcoat pocket case, which I have kept in constant use for the last five or six years. It contains a clinical thermometer, which is thus saved from many dangers, a knife with Syme's and Paget's blades, scissors, a combination of probe director and grooved needle, dissecting or dressing forceps, and a caustic holder. There is, besides, a pouch at the back for needles, sutures, &c. This forms an armamentarium sufficient for the ordinary round of visits. The case lies flat, and without the slightest inconvenience, in the upper waistcoat pocket and takes the place of the weighty and inconvenient so-called pocket case. The dimensions are 4½ in. by 2⅝ in., the weight when filled is 2½ oz. and the price 30*s*.

Finsbury-circus, E.C. S. H. APPLEFORD.

THE CERES AUTOMATIC LETTER AND CARD FILES.

ALTHOUGH this system cannot, perhaps, be properly described as a *new* invention, having now been before the public some time, yet at any period one is always ready to welcome an improvement in the manner of conducting any of the varied and complex duties which combine to make up the day's work of the average business man, not the least formidable task in which is the (generally unsatisfactory) "putting away" of the large amount of correspondence &c. with which the majority of us are inflicted. To be in possession of the means to place one's hands almost instantaneously on a letter (or, for the matter of that, on anything that can be written, or printed, or pasted on a piece of paper or on a card) is a consummation many have at all times devoutly (or otherwise) wished for, but have dismissed as chimerical. Last January we expressed approval, at first sight, of the plan adopted by Mr. Bowater Vernon for keeping correspondence and papers in order by means of the Ceres Letter and Card Files. We have now tried the practical working of both the letter filing arrangement and the card system, and the result is that we can emphatically endorse all that has been said in their favour. For simplicity in use and ready adaptability to varying needs and requirements of work Mr. Vernon has devised a plan which will be difficult to rival. The plan of using cards or slips of paper is an outcome of the card catalogues now so familiar in our public libraries, with the important advantage of an automatically self-fixing support holding the cards or slips in position, and thereby dispensing with the troublesome and annoying necessity of threading them on, and unthreading them from, a rod, as is the case generally. The slip trays (which can be had for a few shillings each) should be welcomed by students and others for notes of reading or research, loose slips being much more handy than note-books for varying arrangement and classification. The new revised catalogue just to hand is more than an ordinary trade list, and it abounds in useful hints and suggestions for keeping letters, papers, &c., and for applying the card or loose sheet system to all manner of requirements. The files and cards can be seen at the offices of Messrs. Dawson and Sons, Bream's-buildings, Chancery-lane, W.C.

A NEW CATCH FOR FORCEPS.

I HAVE devised a catch, which Messrs. Mayer and Meltzer have made for me, for uterine and other forceps. From the figure it will be seen that the ordinary ring handle for the thumb is replaced by a catch curving downwards, which may engage with any of a series of notches cut in the ring of the lower handle. The advantages of instruments embodying this feature may be summed up thus: (1) economy of size and weight, the handles occupying only half the space of those of ordinary fashion provided with locking mechanism; (2) firmness of the catch, which cannot slip; (3) increased view while operating, the hand being out of the line of vision; and (4) cleanliness, a very satisfactory method of disarticulating the blades being employed to facilitate cleaning. The Mop Forceps hold the sponge firmly without tearing, thus doing away with the risk of detached fragments of sponge being left in the abdominal cavity. This instrument also makes a useful ovum forceps. The Vulsellum Forceps take a firm grip of the cervix, being especially made for pulling down the uterus. An operation can be commenced by the introduction of a Fergusson's speculum, through which the forceps may be applied. The speculum can then be withdrawn without detaching the vulsellum and a Sims's speculum introduced if required. The Intra-uterine Forceps are for applying medicaments to the uterine cavity. The ends are well rounded and the stem is graduated, so that the instrument can be used as a uterine sound. The Pressure Forceps meet the exigencies of an operation requiring the presence in the abdominal cavity or wound of several pairs of forceps, which, if they are of the ordinary form, is very embarrassing; but if they are made after this model (see illustration) both the view and the

manipulations of the operator are impeded in a much less degree. Moreover, the reliable nature of the catch is here of great value, as it is so constructed that it is impossible for it to slip. The above are a few of the many forms of forceps to which I have thought the catch applicable. Other forms can be made according to individual requirements.

D. LLOYD ROBERTS, M.D. St. And.

St. John-street, Manchester.

CHOLERA.

ACCORDING to the latest accounts from Constantinople the number of cholera cases has sensibly diminished of late. The disease only exists in a sporadic form, not more than one case on the average occurring daily, and there is, it is believed, no ground for apprehending any epidemic. It appears that, as regards the recent outbreak of cholera at Honolulu, the disease made its appearance on Aug. 17th, and between that date and Sept. 5th there were 39 cases and 31 deaths. No Europeans had been attacked. Later advices received at San Francisco on Sept. 27th state that altogether 86 cases and 40 deaths have occurred at Honolulu, and that among the victims were three whites. The spread of the disease is said to be subsiding.

The Spanish Government has received official warning that cholera is spreading in Morocco.

The reported prevalence of cholera at Salford does not seem to have had any foundation beyond the fact that some cases of diarrhœa or so-called English cholera, such as are not at all uncommon in this country at this season, had occurred there. The officials of the Local Government Board have not received any intimation of the existence of fatal cholera at Salford, and the report is discredited.

THE LANCET.

LONDON: SATURDAY, OCTOBER 5, 1895.

IN the case of the researches of no man of the present century is it easier to gauge the enormous importance and the immense practical bearing that they have had than in that of LOUIS PASTEUR. The pertinacity with which he has adhered to the special detail at which he was for the time working, the faculty of demonstrating in the most clear but simple fashion such point, and the power of fitting these details when demonstrated into one harmonious whole to form a coign of vantage from which to attack other problems have always made PASTEUR'S work interesting, nay, even fascinating, to every educated mind; whilst the intensely practical character of many of his researches has gained the respect of those who can see good in no investigation on which £ *s. d.* is not written. PASTEUR, therefore, has received a meed of honour and reward even during his lifetime such as falls to the lot of few, even distinguished, men; but it may confidently be predicted that as his work is more fully appreciated, ridiculous as such a statement may seem at this time, and as its bearing on the study of the many still unsolved problems of disease is recognised, his reputation as an investigator will grow, and PASTEUR will stand out as an intellectual giant head and shoulders above his fellows. His early physical and chemical training developed in him an accuracy and a wealth of experimental resource without which little of his great work could ever have been accomplished; and his experiments on the tartrates and paratartrates, commenced when he was a young man, little as they seemed to bear on his after-work, really formed the basis on which most of his biological experiments rested. He was struck by the fact that during the process of fermentation of ordinary dextro-tartrate of ammonia in a solution containing organic matter a distinct micro-organism made its appearance. Then, too, he had been able to break up paratartaric acid by the addition of green mould, in the presence of inorganic crystalline salts such as phosphates and salts of ammonia only; this was accompanied by the disappearance of the dextro-tartaric acid and an increase in the number of fungi and bacteria in the fluid. Out of these experiments arose the controversy that raged round the subject of abiogenesis, and this was settled beyond dispute by experiments perfected by PASTEUR, although he followed the lines of those instituted by SPALLANZANI and SCHULZE, when he showed that bacteria and fungi, though developing most readily in those solutions which contained organic matter, were, nevertheless, capable of growing and multiplying in fluids in which no organic matter was present, so that the theory that they were developed from the running together of albuminoid molecules was once and for all time laid to rest. He further showed that fluids containing organised nitrogenous matter might remain unchanged for an indefinite length of time, even under conditions which, on the old theory of biogenesis, should be most favourable to the development of organised living cells, if care were taken to previously destroy any living organisms which might be already present and to prevent the entrance of such organisms from without. From this point the transition was comparatively easy to the position that fermentation and putrefactive changes, which only supervened when certain kinds of micro-organisms were allowed to gain access to fluids containing nutritive materials, were really the result of the action during their life-history of such micro-organisms. His researches on fermentation in connexion with French wines and his experiments with the mycoderma aceti soon convinced him that special kinds of fermentation were set up, given certain media, by different kinds of micro-organisms, each form having its own special fungus or bacterium.

The next step was the differentiation of a special etiological factor in the pathogeny of the silkworm disease, which at one time threatened to ruin the silk industry of France. He traced the "spot" disease or "pébrine" to the nosema bombycis, which had previously been described by NAEGELI as small, glistening, oval corpuscles which lead a parasitic life in the silkworm at its various stages; and by appropriate treatment—the destruction of all silkworm eggs that were suspected of being unhealthy—he was able to assist the silk-growers almost to stamp out this disease. He went beyond this, however, for he showed how certain chains of micrococci in the alimentary canal of the silkworm gave rise to another disease characterised by a peculiar lethargy. By these two sets of experiments he laid the foundation of the germ theory of disease, which has since borne such abundant fruit in the regions of practical and preventive medicine. He demonstrated the fact that certain specific organisms endowed with definite morphological and physiological characters are capable, by their presence and by the action of their products, of giving rise to specific infective disease; he pointed out the special *rôle* played by certain definite organisms in the production of different kinds of fermentation, putrefaction, and disease; and, in fact, on his observations and ingenious experiments as a basis built up a theory of a living contagium or rather brought it from a condition of chaos to a position protected from assault by a fortification of scientific proof. Instead of assigning to micro-organisms a general and common action in the initiation of the above processes he allotted to each one its own special part.

Such specific micro-organismal action having been traced in one or two instances, it was a comparatively shor step to the demonstration of an organised and living contagium in other specific infective diseases, and anthrax, fow cholera, and a number of similar diseases were in turn studied and with similar results. His next most important investigations were connected with the production of immunity by means of slight attacks of a disease set up by the use of a modified virus. His experiments on anthrax and fowl cholera may now be looked upon as classical, and there can be no doubt that, without his discovery of the action of specific organisms in the production of the several diseases with

which they are associated, the theory of toxines and antitoxins, which promises to play such an important part in the treatment of disease, could never have been advanced, or if advanced could never have been proved.

PASTEUR'S work in connexion with hydrophobia marked another great advance on any of his previous work, in so far as he was able to prove that not only could disease processes be prevented by "vaccination" prior to the injection of the *materies morbi*, but that the progress of the disease might be cut short or aborted even when the vaccination was carried on only after the virus had been introduced into the body. Much is written about the want of success in a certain proportion of the cases that have come under PASTEUR'S method of treatment for rabies; but anyone who will dispassionately and without bias examine the statistics of the results obtained in the various antirabic institutes, and compare these with the statistics of the cases that have not been so treated, cannot fail to be impressed by the enormous difference in the mortality under the two sets of conditions. Without vaccination the antitoxic serum method of treatment could never have existed, and it may be confidently anticipated that in all those diseases in which there is a localised formation of a poison, which in turn appears to act specially upon certain tissues, an antitoxic method of treatment may ultimately be obtained. It will, however, be a long time before it is fully recognised how great has been PASTEUR'S influence on this work, not only during the time that he was actively engaged in experiment, but also through the counsel and criticism which he bestowed on the work of his pupils and colleagues during the later years of his life. PASTEUR was always the head of the Pasteur Institute. Although he has not published a line since Dec. 27th, 1886—when he wrote his famous letter upon hydrophobia, which appeared in the first pages of the Annales de l'Institut Pasteur—his mind and hand may be traced, directly or indirectly, in every page of the nine volumes in which are recorded the work carried on in this Institute; moreover Listerism is the outcome of the application by a great surgeon to his own work of some of the principles which PASTEUR enunciated, as a result of which surgery has been raised from the level of a mere handicraft to the dignity of a science. PASTEUR was a man of a century. He had a great mind and an infinite capacity for detail; he had great tenacity of purpose, though his horizon was limited by no narrowness of vision. That he was a true Frenchman goes without saying, but his discoveries belong to the world. No man has contributed so greatly to our knowledge of the fundamental principles that govern the course of disease processes, and few have had so little to retract of what they have published. Such a result could only be the outcome of accurate working, clear thinking, and lucid exposition. It is interesting to note of such a man that his religion, his simplicity, and his affection for his parents and for his family were maintained unaltered in their purity through all changes and controversies. His was not the wisdom of the agnostic, but the faith of a clear-sighted man who, interpreting much through his grand intellect, was still conscious of a world beyond that which he had probed deeper, perhaps, than any of his fellows. France may well mourn the loss of such a man; and all men, irrespectively of nationality, who have a love for truth and an admiration of directness of purpose and keenness of intellect must mourn with her.

ONE of the greatest triumphs which medicine has achieved during the last few years is in the successful employment of the natural secretions of the animal body in the treatment of disease. Such therapeutic methods are the more to be valued since they are founded on a rational rather than an empirical basis. Nothing can be more satisfactory to a scientific physician than to control a disease by supplying to the body a substance the deficiency of which has caused the morbid process in question. The greatest success in this line of treatment has been in cases of myxœdema. This disease was first described as cretinism in adult women by Sir WILLIAM GULL, and the name which it now bears was given to it by Dr. ORD on account of the excess of mucin in the skin, which he found in several cases. Further experiments on monkeys by Professor KOCHER and others abroad and by Mr. VICTOR HORSLEY in England showed that all the symptoms of myxœdema were produced by removal or atrophy of the thyroid gland, and attempts were thereupon made to counteract these symptoms by the grafting of healthy thyroid on to that which had been removed or atrophied. As might have been expected, the practical difficulties attendant on this operation were found to be insuperable, but the principle was established, and from that time forward the methods of artificially supplying the organism with the products elaborated in the thyroid gland passed through rapid stages of simplification till they reached the compressed forms which are now so familiar to everyone. The success met with in cases of myxœdema prompted an investigation into the action of thyroid juice on other diseases, and the condition known as exophthalmic goitre, or Graves' disease, was naturally among the first of those to which attention was directed. This disease and myxœdema are in some respects the antithesis of each other. The enlarged thyroid gland of Graves' disease is one of its most conspicuous features, while the almost invariable tendency of such patients to have the emotional part of their nature unduly developed contrasts remarkably with the mental dulness and apathy of myxœdema. Over-secretion of the thyroid gland, therefore, at once suggested itself as the starting-point of Graves' disease, but this plausible theory has not yet received any decided clinical verification, although some cases have been relieved by the extirpation of the gland. It is possible that in the enlargement of the gland the secretion may undergo some subtle chemical change which, though its nature is at present unknown, may ultimately be counteracted by some simple means. Thyroid feeding in myxœdema has long since passed beyond the stage of experiment and inference, and has come to be recognised as a remedy of unquestionable efficacy. It has been used experimentally in many other diseases, and has met with some considerable success in certain affections of the skin, but here we are unable to follow the therapeutical methods by which a cure is effected, and, moreover, it is doubtful if its action is sufficiently reliable. The direct relation of the thyroid gland to myxœdema and its undoubted therapeutic efficacy

when administered in cases of that disease opened up the way to the investigation of the action of the other so-called ductless glands, and an extensive knowledge of their actions is being obtained. Professor SCHÄFER in his Address in Physiology at the recent meeting of the British Medical Association gave a full account of our present knowledge of this subject, much of it being the result of his own indefatigable work. To all appearance the use of "internal secretions" has a great future before it in the treatment of disease. The extension of our therapeutic resources due to this discovery, together with the introduction of antitoxic serum, mark an important stage in the advance of medicine as a healing art.

THE First of October, as Sir JAMES PAGET said, is a New Year's Day to the medical student, and, if he takes careful note of the counsel of his wisest advisers as given to him in the opening lectures and in other ways, he may make the day to be "the fair beginning of a time." In the introductory addresses there is a variety which may satisfy all tastes. Possibly there are one or two that will confirm the cynics in our profession in their disrespect for such occasions. In these the speakers seem to flounder about from one thing they have heard to another, without point, without connexion, and without dignity. But these are the exceptions, and the first-year student, or the fifth-year student for that matter, must be "wise in his own conceit" who can scan the introductories of the year without feeling that they abound in inspiration and in instruction which will serve them in quiet moments of duty, of temptation, and of difficulty. We should be prepared to judge students and to forecast their future success very much by their reception of such truths as find expression at the opening of sessions. Much has been said of late as to the need for more explicit ethical teaching in our medical schools. It exists already, and is most pronounced on the opening days of the session, when the many-sided relations of the profession are demonstrated, and the claims of the public, of patients, of the poor, of the lower animals, and of fellow practitioners are all insisted on; when all mean devices for getting practice are denounced, and when all careless and slipshod work, all defect of sympathy, and all "doing" that falls short of what Sir JAMES PAGET called "doing one's best" is pronounced to be unworthy of the profession to the practice of which the new students and the old students alike aspire.

It is difficult to single out individual addresses for special notice. Each mind, according to its bent, will make its own selection, and what will strike one as interesting will appear to another to be either forced or commonplace. We shall endeavour rather to emphasise subjects than individuals in what little we have to say. We may make one exception in the case of Sir EDWIN ARNOLD. When a distinguished layman, representative of literature in its widest and highest forms and in its most useful and varied applications, does the profession the honour of undertaking the opening of a great medical school and gives us his views of the profession to which he does *not* belong, when he magnifies every virtue of the profession and summons all his powers of euphemism not to suggest any possible thought of fault in its methods, it is both just and pleasant to give much heed to what he says. He gives us the great advantage of "seeing ourselves as others see us." In this aspect all will study with rare interest the picture drawn by Sir EDWIN ARNOLD of what is, in his judgment, "the best, the gentlest, the loftiest, and the purest of the secular crafts which men follow." If this be a true judgment of our craft, what more of ethic is needed by the student who enters on it than the call to prepare for it, to live up to it, and to watch day by day the men who best exemplify it? The old satirists of medicine have had their chance and they have used it. But they would find little in medicine now on which to feed their "immortal scorn," and our present danger is lest we be too much elated with the tribute of outsiders who see the drift of the great movements which have revolutionised medicine, and who are too generous and too much outside the profession to see its remaining faults. He will be a dull student who can read this great panegyric of our art without emotion and without the desire to distinguish himself by advancing the growth of some branch of "the great tree which is set for the healing of the nations," whether it be in the slums of our own European cities or in the Zenanas of the East, which Sir EDWIN ARNOLD so vividly presents to us as spheres for medical women. We cannot forbear one allusion to his plea for consideration for the lower animals in the matter of vivisection. Our own views on this subject have never varied, and they do not differ from his. We should be ready to exclude from the profession the man who wantonly and in the name of medical science inflicted unnecessary cruelty on the meanest animal. While recognising that man is "of more value than many sparrows," or even many dogs and many horses, we recognise the solidarity of all living things and the obligation of the greater to the less; and we feel sure that the profession will join with us in thanking Sir EDWIN ARNOLD for his exquisite gentleness in dealing with this great theme, and his generous recognition of the humanity of those who exist to diminish suffering and to prolong life. The relations of pharmacists and medical practitioners were handled admirably and courageously by Dr. FREDERICK ROBERTS in his address to the Pharmaceutical Society. At Owens College Dr. LEECH vindicated the ethics and methods of HIPPOCRATES as good for all time and at the root of all good conduct and practice. HIPPOCRATES is, after all, the Father of Medicine, and we may well be content to forget some of our "forefathers" in favour of him. Another great function of our profession was the theme of attention at St. Mary's Hospital in the address of Dr. A. P. LAURIE, whose public duties have led him to consider the bearing of various industries on the health of the people. Some of these, if not checked, threaten racial degeneration. The insidious dangers of lead and phosphorus and other poisons, of breathing an atmosphere of dust, and of working at high temperatures still confront those who have to protect the health of British workmen, and in regard to these subjects Home Secretaries must be guided by medical men. Dr. LAURIE suggests that far higher duties and far higher pay must be forthcoming

for surgeons under the Factory Acts than any yet contemplated.

We have come to the end of our space. But we have said enough, we trust, to lead our readers to study the addresses and to realise for themselves their responsibilities as students and practitioners of an art of which so much is expected and to which such great honours are already paid.

Annotations.

"Ne quid nimis."

PRESENTATION TO DR. HUGHLINGS JACKSON.

THE opening day of the medical session of 1895 will be memorable in the history of the London Hospital Medical School. The occasion was made one of exceptional interest by the presentation of his portrait to Dr. Hughlings Jackson, together with a silver ewer and stand. The presentation was subscribed for by Dr. Jackson's medical and surgical colleagues on the staff of the London Hospital and numerous friends both at home and abroad, "in recognition of their esteem and admiration of his great services to the London Hospital and Medical College, his distinguished position in the profession, and the advances he has effected in medical science by his laborious investigation and profound insight into diseases of the nervous system." Another portrait by the same artist was presented to the medical school of the hospital. Dr. Hughlings Jackson is one of the least demonstrative members of the profession, but this quality only increases the singular interest and, we may add, the affection with which he is regarded, not only by his colleagues, but by the profession in every part of the United Kingdom and of the world. The authorities of the Medical School were fortunate in getting Sir James Paget to preside and to make the presentation. The catholic nature of the occasion was shown by the presence of Professor Burdon Sanderson, Sir Spencer Wells, Sir William Broadbent, Dr. Barlow, Dr. Buzzard, and others. Sir James Paget spoke, as almost only he could speak, in regard to the professional history of Dr. Hughlings Jackson and the character and significance of his work. It was his rare satisfaction to be able to revert to the fact that among the generations of students whom he had taught were the names of Dr. Hughlings Jackson and Mr. Jonathan Hutchinson, the latter of whom was unfortunately and unavoidably absent. He dwelt on the constant effort of Dr. Hughlings Jackson to bring all clinical facts and all scientific ones into harmony for the practical good of the patient, and touched with special emphasis on his fruitful researches into the localisation of brain function, which had given lucidity to physiology and guidance to surgery. Dr. Hughlings Jackson's reply was characteristic in the extreme and was of much scientific and biographical interest. He said that some of his most important observations were made in the out-patient department. He was careful to say how much the pleasure of the occasion was enhanced to him by the presence of Sir James Paget and the numerous friends by whom he was surrounded. His colleagues, through Dr. Stephen Mackenzie and others, gave very eloquent expression to the sentiments with which Dr. Hughlings Jackson was regarded by them and to the hope that for years yet to come they would be able to have his opinion and his help as consulting physician to the hospital. It is worth recording that Mr. Hutchinson once told Dr. Mackenzie that the greatest work he had ever done was to discover Dr. Hughlings Jackson. The proceedings were made still more interesting by the presentation of prizes to the successful students by Sir James Paget, and to the nurses of the hospital by Mrs. Hale, the wife of the chairman of the hospital. In this part of his duties Sir James Paget gave very explicit expression to his opinion that the existence of a medical school in connexion with a hospital is a great advantage to the work of the hospital—a great security for better clinical work and better care of the patients. No Government inspection could be so good as the daily criticism of observant and intelligent students. Taken altogether, the school of the London Hospital may be congratulated on the opening day of the session in its happy combination of a well-earned tribute to a leader in medicine of whom we are all proud, and in its encouragement to students, who will not soon forget either their prizes or the words of dignified wisdom with which they were presented. The lay authorities of the hospital were represented by the chairman (Mr. John Hampton Hale) and the treasurer (Mr. J. H. Buxton).

PRECEPTS FOR CYCLISTS.

CYCLING seems to be quite as popular in France as it is with us, and yet there are medical authorities amongst our neighbours who condemn the practice because, in their opinion, it is liable to be attended by cardiac or circulatory troubles. It is true that in this country similar allegations have been made; but, so far as we are aware, the charge has never been seriously maintained, and no well-authenticated cases of disease arising from the use of the cycle have been placed on record. On the whole, it may safely be said that self-propulsion on two or three wheels is about as salutary a form of out-door exercise as could well be devised, provided always that the injurious and hideous bent posture affected by "scorchers" be rigorously condemned and avoided. It must not, however, be inferred from this ability on the part of the Anglo-Saxon race to indulge in cycling, with not only impunity but benefit, that the rule is likewise applicable to the members of other nationalities. All English schoolboys are accustomed to out-door sports of a more or less violent character from their earliest youth—cricket, football, tennis, and other athletic games of various kinds are as much part and parcel of the curriculum in our schools nowadays as the Latin grammar, if not more so; and thus it comes to pass that very few adults arrive at maturity with their organs and muscles uninured to intermittent extra calls, in every shape and form, upon their powers of endurance. Our rising generation enters upon life physically prepared for any emergency, and thanks to this early training it is that cycling may be regarded as practically harmless, even though its votaries should postpone their initiation until comparatively late in life. Now, although in Great Britain there may be no medical objections to cycling when judiciously carried out, there are certain attendant circumstances involved in the practice abroad which demand consideration. Generally speaking, it may be said that in the matter of physical exercise the system of education usually adopted on the Continent is totally different from ours. Sports and pastimes are but little encouraged in foreign *lycées*, and such as do exist are for the most part sedentary performances scarcely deserving to be classed as trials of strength and stamina. The youths consequently grow up unfitted to withstand the severe strain of cycling, and the circulatory apparatus is naturally the first portion of their economy to give way under the unwonted exertion. The foregoing remarks were suggested by some "precepts for cyclists" that have been drawn up by M. Rocheblanc for the benefit of his fellow countrymen. It is not likely that, so far as the male sex is concerned, the recommendations will be adopted on this side of the Channel, but their reproduction may be advantageous to the

ladies who have taken up cycling with such marvellous energy. Girls do not serve the same apprenticeship to rough games that boys do, and therefore the French physician's warnings are more pertinent to their case. 1. No one should become an habitual cyclist without medical authorisation. Before committing himself to an opinion the medical man consulted will do well to examine the beginner on dismounting from the machine as well as beforehand; there are certain cardiac defects which only become recognisable when the subject is under the influence of excitement or fatigue. 2. A cyclist should at first be content with a moderate pace, not exceeding twelve kilometres per hour (about seven miles and a half). A higher rate of speed should only be indulged in after the rider has gone through a regular course of training. If a break in the practice occurs, lasting even a few days, the cyclist should recommence at the slower rate. 3. The temptation to go quickly must be controlled as far as possible. A bicycle travels well-nigh of its own accord, and it is very hard to resist the "delirium of speed." With a light machine on a good road, and helped ever so little by the breeze, an amateur, even when only half trained, can easily achieve his twenty-five kilometres within the hour (fifteen miles and a half). This is too much, seeing that when doing from fourteen to sixteen kilometres the rider's pulse rises to 150.

WEATHER AND HEALTH.

FOR once the lacking arrears of an uncertain summer have been paid in full measure and with almost unbroken regularity. Now there are signs of a change, though whether this will endure in its present phase or will itself give place to another season of late but continuous warmth it is impossible to predict. The past month has not, on the whole, been an unhealthy one as regards the more usual causes of dangerous illness. Diarrhœa alone of the series occupies a pre-eminent position, and it has been by far the most frequent cause of mortality. This circumstance is not in itself remarkable, since we are accustomed to regard the months of early autumn as peculiarly liable to the prevalence of this disorder. The recent season of unusual heat has added a fresh testimony to the truth of this observation. It has also shown that, as in former years, excessive solar temperature only tends to emphasise that testimony. There are obvious reasons which account for this effect. The more rapid evaporation of subsoil water with its contained impurities, the increased rapidity of putrefaction in many articles of diet and in decaying waste matter, whether animal or vegetable, and the like processes in drains and in badly ventilated living rooms have each their share in the work of causation. Accordingly, there is no occasion for surprise that the recent sultry month has been marked by a much more than ordinary prevalence of enteric disorders. A rise in the mortality from diphtheria is accounted for on the same grounds. Summer heat brings with it another danger, and this, too, has been somewhat more than usually active during the past fortnight—namely, the liability to chill. We are all familiar with dilemmas as to the amount of clothing suitable to a climate which is out of season, and therefore daily liable to variation. We have all felt the inconvenience of exertion in such weather as that of last September, and some have doubtless also realised the treacherous after-chill which readily follows the slightest exposure while overheated. There should, therefore, be no difficulty in accounting for an increased mortality from diseases of the respiratory organs during our autumnal summer. With the beginning of another month comes a change of weather, a cooler and in so far a truer season, although attended with damp morning mists. Somewhat sudden in its arrival, it may, if not watched and provided against, surprise some who are still uncertain whether to break definitely with the genial warmth which is still so recent. Such persons, especially if not young, will, if wise, incline to the side of caution. The airy liberty of widely opened doors and windows, the remembered comfort of light clothing, and the quiet and freedom of cool evening rambles are no longer to be reckoned among guaranteed methods of recreation. September established a record of exceptional warmth. October, though not yet to be described perhaps as "chill," rather suggests a belief that it will before long exhibit its usual characteristics.

DEATHS UNDER CHLOROFORM.

WE are indebted to Mr. E. V. R. Fooks, the acting medical superintendent of the St. Saviour's Union Infirmary, East Dulwich, for the particulars of the following case. The patient, a girl aged fourteen years, was admitted into the infirmary on June 5th suffering from tuberculous glands in her neck. The glands had suppurated and formed an abscess, leaving an intractable sinus. On Sept. 11th it was decided to scrape the sinus. Chloroform was given, being dropped upon lint in small quantities. Before administration the patient was examined and pronounced to be free from organic disease. The anæsthetic was commenced at 11.35 A.M., and within a few minutes, when two drachms had been given, struggling took place, and some cyanosis soon appeared about the lips. The chloroform was withdrawn at once. The respirations were, it is stated, still going on, but the pulse weakened and became imperceptible. The pupils reacted to light up to the time that cyanosis appeared; they then became widely dilated. Strychnine was hypodermically injected, inversion (Nélaton's method) was practised, and as soon as natural breathing ceased artificial respiration was commenced and continued for one hour and twenty minutes. "The battery was applied over the vagus and præcordial region." The operation was not commenced. Death took place twenty-five minutes from the time the chloroform was first given. At the necropsy it was found that there was dilatation of the right ventricle by fluid blood and some congestion of the cerebral vessels was noticed. The chloroform was administered by the medical superintendent. Death would appear to have been caused by an overdose being inhaled during the stage of struggling, and was probably caused by respiratory rather than by cardiac failure, although respiratory movements are noticed as having occurred even after the pulse had failed. There was evidently some obstruction to the passage of the venous blood through the lungs, and this would rapidly bring about cardiac failure. Whether electrical stimulation over the vagus and præcordium is likely to help the heart's action in these cases is at present open to doubt. The inhibition of the heart has been held by some authorities to be protective by lessening the flow of chloroform-laden blood to the nerve centres. This, however, must be an undesirable thing in one cyanosed by chloroform. Certainly stimulation of the vagus would be likely to produce this cardiac inhibition. Stimulation of the phrenics is of less questionable value whenever it is possible to limit the spread of the current and protect the vagus from this overflow current. Other deaths under chloroform have recently occurred. In one the patient was a female infant aged fourteen months who was taken to the London Hospital. The child was found on admission to be in a very grave condition. There was an enormous swelling under the jaw on the right side of the neck, which affected the breathing. Fluctuation was felt, and the tumour was diagnosed as a case of tuberculous glands which had suppurated. The infant took a "few whiffs" of chloroform, and the abscess was punctured. On the completion of the little operation the

child was placed in bed and died very soon afterwards. The surgeon in charge informs us that the death was not due to shock from the operation, although possibly in the weak state in which the infant was the shock may have accelerated the fatal result. Probably the same may be said of the chloroform. The case is clearly one of death *under* chloroform rather than *from* chloroform. A very similar case is reported from University College Hospital. A girl aged seventeen months was admitted on Sept. 18th suffering from a large abscess in the right lumbar region. Although fairly developed she was pale, and had bronchitis and a temperature of 100·4° F. On Sept. 20th the abscess—perinephritic in nature—was opened. Chloroform was given by a house physician from lint, some three drachms being used in about ten minutes. As soon as the child was fairly under the abscess was incised and much pus evacuated. Simultaneously the respiration stopped, but the pulse was perceptible for some minutes afterwards. There was some difficulty at first in getting air to enter the chest, so a tube was passed down the trachea. The usual measures for resuscitation were adopted. The necropsy showed all the organs to be pale; no venous engorgement was seen. This again seems to be a death due to operative measures reacting on a weakly patient. A verdict of "Death by Misadventure" was returned by a coroner's jury at Newport, Monmouthshire, last week, at an inquest held on a patient who had died in the Newport Infirmary. The deceased had recently received an injury to his finger, which necessitated the amputation of a portion of it. A few days later it was requisite to perform another operation higher up. Chloroform was administered in the presence of four members of the profession, but shortly after the anæsthetic was commenced the respiration ceased and the patient died before the operation was attempted.

ALCOHOL IN IRISH WORKHOUSES.

WE are indebted to the Irish Association for the Prevention of Intemperance for a return of the amounts of alcoholic beverages consumed in the various workhouses in Ireland during 1891 and 1893. The return shows a total decrease in the expenditure on spirits, wine, and malt liquors during the latter period of 3*d*. per head of the inmates. When we come to an analysis, however, the progress of retrenchment is not so clearly seen. Out of 159 unions three are consistently abstinent and spend nothing on alcohol, seventy-three have a diminished liquor bill, while in eighty-three the consumption has increased. The sums expended in different cases vary in the most eccentric manner from 1*d*., 3*d*., or 6*d*. to 15*s*. 7*d*. per head. It is remarkable, also, that the highest figures have been reached by the smaller establishments, the palm for expensiveness being borne by Carrickmacross with 124 inmates, while Belfast with 3106 pays but 3*s*. 10*d*. per head for alcohol. Cork, North and South Dublin, and Limerick, which also provide for many poor, tell the same frugal story. On the other hand, some of the smallest unions are the most economical: Stranorlar, which has 66 occupants, is totally abstinent; and Westport has 168, and spends 1*d*. on each. A somewhat larger institution, that of Newry, houses 213 persons, and allows nothing for alcoholic liquors. Thus, if opinions respecting the necessity of supplying stimulants to Irish workhouses do not quite correspond in number to their official guardians, they do traverse a long and costly scale between the emphatic *nay* and the equally positive *yea*. In discussing this question we are by no means disposed to accept without reserve the authority of mere statistics. Some latitude must in reason be allowed for explanation, and it may be that necessities of illness have had something to do with the origin of otherwise remarkable differences of expenditure quoted in the report under consideration. Alcohol as a drug has its legitimate place in medical treatment, and this fact is not affected by the social standing of those who require it. To admit this, however, implies no sanction of its routine or general use. Weakness, illness, or old age may each constitute an occasion for its employment, but only under the prudent supervision of medical authority. It would be interesting to learn whether this authority has been invariably consulted in providing stimulants for the use of inmates in Irish workhouses, and, if so, whether its influence has been exerted in each instance with due vigilance and exactitude. If the requirements of weak and sick persons are sufficient to explain the increased outlay on alcohol where this has been incurred, we have nothing further to say; but we fail to see that the ratepayer need go beyond this point in the exercise of his parochial duty. The report before us will have done good service if it leads to such an inquiry as will furnish an explanation of the costly discrepancies in expenditure to which it directs attention. Such an investigation would certainly seem to be called for in the public interest.

UNUSUAL PROCEDURE AT AN INQUEST.

AT an inquest on Sept. 24th, 1895, held by Dr. Eugene Yarrow, deputy-coroner for North-East London, the jury, seventeen in number, could not agree, twelve being in favour of a verdict of accidental death, and five, including the foreman, being of opinion that there was negligence. The coroner decided to take the finding of the twelve. The question has been raised whether the verdict was not illegally received, inasmuch as the foreman's signature was not attached. From the fact that the foreman has the oath administered to him primarily and separately, it seems reasonable to infer that the Legislature intended the verdict of his fellow jurors to be delivered through him. At the same time the jury need not consist of more than twelve, and consequently it is arguable that if that number return the same finding the section of the statute is satisfied. Considering the uncertainty attaching to the intentions of the Act, it would be well if a case were stated for the opinion of a superior court. Should the proceedings be declared null and void a fresh jury would have to be empanelled, and as the inquest has to be taken *super visum corporis*, exhumation would be necessary, a circumstance at once objectionable and vexatious.

THE DISPENSING OF PHYSICIANS' PRESCRIPTIONS.

ACCURACY in dispensing is obviously one of the most important factors connected with the treatment of disease; but although this is so it must, we fear, be admitted that the quantitative analysis of medicines made up from physicians' prescriptions is not as yet carried out on a scale in any degree proportionate to the importance of the subject. It is for this reason more particularly that we welcome a report of Dr. Bernard Dyer, the county analyst of Leicestershire, which he has recently made to that county council upon the quantitative analysis of thirty-nine samples of medicine obtained by submitting to druggists in the county prescriptions for a tonic containing iron and quinine. Dr. Dyer reports with pleasure that of the thirty-nine samples analysed thirty-six were both accurately dispensed and properly labeled. In regard to the remaining three samples, it appeared that in one the mixture, although dispensed in accordance with the prescription, was inaccurately labeled and the patient was directed to take two teaspoonfuls for a dose instead of two tablespoonfuls, as ordered; in the second case the mixture was slightly too strong; and in the third the amount of quinine was two and a half times in excess of that prescribed. In none of these cases does there seem to have been any attempt to defraud the public in the sense of depriving the patient of the full

benefit anticipated by the prescription; but unfortunately, in the matter of some drugs, though not in the case of those specifically referred to here, sins of commission might have been far more disastrous than sins of omission, and an increase of strength to the extent of two and a half times that ordered might lead to a fatal result. In the making up of prescriptions absolute accuracy alone is allowable. We trust that Dr. Dyer will continue his investigations in this direction, and we would suggest the desirability of paying attention to pills, powders, capsules, &c., which would seem from careless mixing to be peculiarly liable to quantitative variations. In cases where undue parsimony in the execution of prescriptions is suspected it is to the more expensive drugs that attention should be directed, whereas in the matter of carelessness the nature of the drug is obviously immaterial.

THE FIFTH YEAR'S CURRICULUM.

WE are glad to learn that some of the special hospitals are altering their arrangements in order to meet the needs of the fifth year's curriculum. At the Brompton Hospital the facilities for the study of diseases of the chest are to be increased by the formation of two new appointments. Clinical clerks are to be allotted to each in-patient physician and clinical assistants to the out-patient physicians. In addition, all students who enter (at a small fee) for the practice of the hospital will be enabled to make use of the vast amount of material (whether clinical, pathological, or bacteriological) that such a hospital affords. A course of lectures on the principal diseases of the thoracic organs is to be delivered each session, open to students of the hospital and to all qualified medical practitioners on presentation of their cards. The opening lecture will be given by Dr. Douglas Powell on Wednesday, Oct. 9th, at 4 P.M., on Angina Pectoris. Full information can be obtained either from the secretary of the hospital or from the deans of the medical schools of the metropolitan hospitals.

THE INCREASING PREVALENCE OF RABIES.

FOR some time rabies has been on the increase in the United Kingdom, and more especially in Ireland and England. In the northern and midland counties, particularly Cheshire and Lancashire, it is never absent, and reports of deaths from hydrophobia due to the bites of rabid dogs are frequent in these regions. But, as on many previous occasions, the malady has been extending southwards in England; and, as has been predicted over and over again for the last quarter of a century, the prevalence of the scourge in the midlands always leads to an extension in other directions, chiefly towards the south. In the London district an increase in the number of cases of rabies has been noted for some time, and precautionary measures must soon be adopted if a serious outbreak of the disease is to be averted. In Surrey the county council has issued a dog-muzzling order, and if this is energetically carried into operation it is possible that the lives of people and animals may thereby be saved. At any rate, a cause of dread to the inhabitants of the county may be obviated by this procedure. But, as usual when muzzling of dogs has to be resorted to for the prevention and suppression of rabies, there is an outcry against the measure, generally from those who know nothing of the nature of the disease or of the measures required to deal with it. In a Surrey newspaper, for instance, there is a letter declaiming against the employment of this measure, and showing a great amount of ignorance of everything pertaining to the subject—ignorance which is unpardonable, considering the amount of information everywhere accessible, when it is remembered that the writer is opposing a measure which is intended to protect human beings and animals from a most agonising death, and that he ignores the experience gained through many years' use of the muzzle, not only in this country, but in France, Germany, Austria, Belgium, Denmark, and elsewhere. The writer does not believe in the existence of rabies, and confesses himself more ready to give credence to the appearance of ghosts than of mad dogs; though on this point his credulity leads him into a contradiction, as he confesses that dogs may become rabid by the use of the muzzle, but says that if they are treated as they should be they will not do so. The writer would seem to be one of those individuals who, destitute of knowledge of contagious diseases, are moved through pseudo-sentimentality to oppose any steps for the alleviation or eradication of one of the most terrible diseases that can afflict man or beast, and who are not ashamed to air their ignorance in the public press or on the anti-hygienic platform. Surely at the present day educated men ought to know that rabies cannot be produced by muzzling or anything else, save by the bite of a rabid animal or by the introduction of its virus into the blood of a healthy one. It is a specific disease, and can only be imparted by a diseased creature which has received the infection from one already infected. The nonsensical objections to the muzzle come from people who are unaware of the evidence upon which its utility is based, and of the opinions of men who have made a special study of the disorder. The muzzle, if properly constructed and fitted, is no more annoying to dogs than is the bit in the mouth of the horse. The compulsory wearing of muzzles is a measure calculated to benefit the canine species as much as other animals, or man himself, and facts testify that whenever and wherever this measure has been adopted the disease has soon disappeared. It is the unmuzzled wandering dog that disseminates the disease. The only objection to muzzling should be that it is not made universal during the prevalence of rabies.

SHOULD THE HEART BE EXAMINED BEFORE CHLOROFORM IS GIVEN TO A PATIENT?

THIS important question was debated at some length between the coroner and some medical men at a recent inquest. A patient aged forty years was admitted into the infirmary to undergo an operation for cancer of the penis. Upon admission he was examined by the assistant house surgeon, who pronounced his heart and lungs to be normal. The man was very nervous about the anæsthetic and expressed himself as being so. He placed himself on the operating table, and chloroform was given "in the usual way," by which we presume the Scotch or open method is meant. The patient took it well at first, but shortly a surgeon who was standing by felt the pulse and remarked that it was extremely feeble. We may presume that the respirations were up to this point not affected; they are said to have become short after this. The patient was at this time beginning to go under, but was not fully anæsthetised. Restoratives were tried, but no rally occurred. In answer to the coroner and a juryman, the chloroformist admitted that he had not examined the heart and deemed so doing quite unnecessary. "The worse the heart the greater the need of chloroform." The man was said to die from shock, but it was added, "I do not suppose he would have died from shock had chloroform not been administered"; and further we are told that "every day they were giving chloroform to people with all sorts of heart disease. That it was wrong to do so was an exploded idea with the profession, although it remained to some extent with the general public." These statements are too sweeping to be passed by without comment. That each medical man has a right to his opinion all will readily admit; but no one is justified in saddling the profession at large with his views or even those of his school. Upon the question of examining a

patient before taking an anæsthetic, it is clearly the duty of the person with whom the responsibility of the case rests to satisfy himself as to his patient's general fitness, and to select with the utmost care the anæsthetic which will be best for the particular case. It is also advisable that this should be done any day before the operation rather than immediately before the administration, provided always that the patient has been sufficiently under observation for the chloroformist to be sure that no acute intercurrent illness has appeared in the interval between the examination and the administration. This wise course seems to have been adopted in the present case. When, however, we weigh the other points in the evidence we do not find ourselves in accord with those who gave it. That "a weak heart needs an anæsthetic" we allow, but we can neither admit nor believe for one moment that the profession considers that "the worse the heart the greater the need of chloroform." Undoubtedly the clinical experience of the past thirty years or more has shown that deaths from heart failure or "shock" of the kind described in the report before us are most rare under ether, if they ever occur, where it is properly given; while under chloroform they are unfortunately by no means uncommon. We do not for one moment suppose that the greatest care and acumen were not shown in the case under discussion, nor do we doubt that there were good reasons for selecting chloroform for the operation; but we cannot but take exception to the statements reported to have been made, not on the authority of one surgeon, however eminent, but as *ex cathedrâ* and representing the opinions of the medical profession at large.

COUNTY COUNCILS AND LOCAL SANITARY AUTHORITIES.

AN inquiry of considerable interest from the point of view of sanitary administration was held recently by Dr. Sweeting at Auckland Workhouse on the part of the Local Government Board. The Durham county council had apparently complained to the Board that the rural district council of Auckland was not, in certain specified parishes, doing its duty in the matter of scavenging, and the question arose as to whether the district council should not be compelled to carry out its obligations in this respect. There was a large attendance of interested persons at the inquiry, and Dr. Eustace Hill, the county medical officer of health, took a prominent part in the proceedings, producing much evidence in support of the county council's contention. The accusation was, however, denied by the district council, whose representative argued that the action of the council had been "hasty and uncalled for," and that the service of many notices was in itself evidence of activity. Dr. Hill, however, rightly observed that activity by no means implied efficiency, and that the enforcement of the notices was the essential point. As, too, the county council had waited for three years before lodging the complaint it could hardly be accused of precipitate action. The evidence of the district council's medical officers of health seems to have been on the whole decidedly favourable to the county council's position, but numerous parish councils in the district opposed the application that the duty of scavenging should be imposed upon the district council. There seems, however, to have been an almost universal consensus of opinion that the condition as regards West Auckland was very bad. The district councillors contended that the council had but recently been formed, and that time had not yet been afforded them of putting their house in order; it was obvious, too, it was urged, that those who lived in the villages complained of were better judges of the necessity of reform or alteration than periodical visitors, &c. With these arguments we are not altogether unfamiliar. The prospective formation of district councils was the excuse for delay and neglect on the part of the old local bodies, and the recent election of the district councils will be made to serve a somewhat similar purpose for months to come. When, however, it is remembered that in many instances the personal constitution of the two bodies differs but slightly, the argument loses some of its force. Doubtless this matter will be well sifted by the Medical Department of the Local Government Board, and the evidence which has been adduced will, we imagine, render the scavenging, at least in the worst villages, compulsory on the district council.

LONDON POST-GRADUATE COURSE.

THE first lecture of the winter term will be given on Monday next, Oct. 7th. The following hospitals and institutions have arranged a scheme of work:—The Hospital for Sick Children, Great Ormond-street (Children's Diseases); the National Hospital for the Paralysed and Epileptic, Queen-square, Bloomsbury (Nervous Diseases); the Royal London Ophthalmic Hospital, Blomfield-street, Moorfields (Diseases of the Eye); Bethlem Royal Hospital for Lunatics (Diseases of the Mind); London Throat Hospital (Diseases of the Nose, Ear, and Throat); Bacteriological Laboratory, King's College (Bacteriology); and the Central London Sick Asylum, Cleveland-street (General Medicine and Surgery). Practitioners can suit their own convenience as to the number of courses they take. The diary is so arranged that none of the hours for lectures clash one with the other, and time is allowed for hospital practice. All information can be obtained from Dr. Fletcher Little, the Secretary, 32, Harley-street, W.

THE EAST LONDON WATER INQUIRY.

THE proceedings of the Local Government Board inquiry into the alleged inadequacy of the water-supply of the East London Company during the recent summer months were commenced at the Hackney town-hall on Tuesday last, the Local Government Board being represented by the departmental inspectors Colonel W. M. Ducat, R.E., and Dr. F. W. Barry. Public interest in the subject appears to have flagged somewhat since the time when meetings were held at which resolutions were passed calling upon the Local Government Board to investigate the matter, for the proceedings closed at an early hour owing to the non-attendance of witnesses. The evidence, however, so far taken, has been chiefly given by medical officers of health whose duties are in the districts involved and by residents in Hackney. Mr. Balfour Browne opened the case for the local authorities by defining the scope and character of the inquiry, and by explaining that it was taken under the Water Acts and the Public Health (London) Act at the instance of delegates from the vestries affected. There was no doubt, he said, of the scarcity of the supply, and he would call witnesses to prove its extent. They would then await with interest the company's explanation. Already, however, the company had attributed their neglect to provide additional storage reservoirs to the opposition of the county council, who rejoined that their opposition was directed against other provisions, and that if new storage reservoirs were required the company might have provided them without any Bill by sacrificing some of its large profits. Several medical witnesses then proceeded to describe the great privation they had suffered and the prejudicial effects upon health owing to an insufficiency of supply for sanitary purposes. Another witness, a midwife, said she had attended a confinement on Aug. 10th when there was practically no water at all to be had. She had not enough on

one occasion to wash her hands with. Laundresses testified to the supply having become so short that their business had come to a standstill. Others stated that while there was a scarcity of water in the residences of the neighbourhood of Hackney, there was plenty of water supplied all the time at a certain cow-yard. The inquiry was adjourned soon after three o'clock, the cross-examination of the medical and sanitary witnesses being reserved until Wednesday, when they were examined chiefly on the question of the abolition of cisterns and as to whether the scarcity of the supply had any substantial effect upon the health returns.

THE MEDICAL OFFICER TO THE ARCHBISHOP'S ASSYRIAN MISSION.

WE referred some little time ago in our columns to the need which existed for a medical officer for this mission, and are glad to be able to say that Mr. H. H. Tidswell, formerly house surgeon at St. George's Hospital, left England on Thursday, the 3rd, for Urmi, in Persia, to take up the necessary duties. An attempt will be made to establish a small hospital, which is estimated to cost about £400. Any person desirous to subscribe may communicate with the Rev. R. M. Blakiston, 7, Dean's-yard, Westminster.

ELECTION OF THE MELBOURNE HOSPITAL STAFF.

THE *Age* devotes nearly a column to an account of the election of the honorary staff of the Melbourne Hospital, as if it were a municipal or parliamentary one. The election recurs every four years. We do not admire the system, and doubt very much whether it is calculated to secure the best men. Be this as it may, the exhibition of all the arts of electioneering over the choice of scientific officers is unseemly. But it is provoked by this method, where thirty-one medical men seem to have competed for eighteen appointments, and those who had been in office were threatened with displacement. Fortunately, the good sense of the constituency prevailed over the vices of the method, and the old staff, with one exception, were re-elected. A reasonable term of service should be granted to officers when once elected.

THE MALARIA PARASITE.

WE adverted not long ago to a telegraphic announcement which appeared in the *Times* to the effect that Surgeon-Lieutenant-Colonel Lawrie, as the result of his investigations, had arrived at the conclusion that there is no parasite in the blood in malaria—a conclusion, it need scarcely be added, at variance with the researches of Laveran, Marchiafava, and quite a number of independent observers in this country, America, and elsewhere. We learn that Surgeon-Lieutenant-Colonel Lawrie was assisted in his work by Surgeon-Captain P. Hehir of the Indian Medical Service, by Mr. Martyn Jordan, and by Dr. Conolly from Melbourne, who was temporarily present at Hyderabad. The investigations were begun on June 8th and were continued daily until Aug. 15th last, being, it is stated, conducted both with fresh blood and with stained preparations, on the methods and according to the formulæ usually followed. As many as 116 cases were investigated. We have not yet seen any copy of the report on the subject, and our information, which is therefore necessarily incomplete, is drawn from an article which was recently published in the *Times of India*. The results of the inquiry are that the investigators allege they have established that the microscope is misleading and useless in the diagnosis of malaria, and that there is no parasite in the blood in that disease. "There is nothing in pure blood but hæmocytes and leucocytes—red corpuscles and white cells." The so-called parasite of malaria is nothing more than the blue-stained nucleus of the leucocyte—the white cell. It is stated, further, that the appearances which Laveran and others have pronounced to be malarial parasites are to be found in the blood in health and disease. The full report on the subject will be awaited with curiosity and will no doubt receive a very critical consideration when it appears.

THE LATE SIR THOMAS LONGMORE, C.B.

NOT only members of the military medical services of this country but also medical officers of other countries will hear with extreme regret of the death of Surgeon-General Sir Thomas Longmore, for so many years the well-known Professor of Military Surgery at the Army Medical School, Netley. We can only refer very briefly now to the lamentable occurrence, reserving for another opportunity the publication of a memoir of Sir Thomas Longmore's life and work. The deceased officer had not only a record of distinguished service in the field, having served throughout the Crimean campaign and in Bengal during the Indian Mutiny, but he was conspicuous for his scientific labours in military surgery and in other directions appertaining to military service and war. His work on "Gunshot Injuries" has been long regarded as the standard one on the subject, and it was only the other day, as it were, that a new edition—rendered necessary by the vast and revolutionary changes which have taken place in the art of war—was published. His "Treatise on the Transport of Sick and Wounded Troops" and his "Optical Manual" are recognised handbooks. He was highly esteemed for his personal qualities and character as well as for his scientific attainments, and his sudden death at Swanage on the 1st inst. will be regarded as a distinct loss by the Army Medical Service and by his many friends.

MEDICINE AND MISSIONARIES.

IT was only fitting that the London Missionary Society, which celebrated its centenary in London last week, should devote an afternoon to a discussion on medical work and its place in the missionary scheme. But while the value of their work is acknowledged by all who are in a position to know, it is to be deeply regretted that medical missionaries are not supplied with the necessary means to enable them to carry on their work in a proper manner. Too often they are sent out with a totally inadequate supply of drugs and instruments, and, more regrettable still, the want of proper hospital accommodation often makes their work abortive. This is especially the case where surgical operations are necessary. Something has been done by medical men themselves to remedy this state of things, and the Medical Missionary Society in connexion with St. Bartholomew's Hospital, which was started with the object of keeping those students who leave the institution for the mission field in touch with their hospital, collects funds and gives grants to enable the missionary to equip himself in a more thorough manner than the funds from the various missionary societies will allow. We recently heard of a case where a medical missionary not only practised his profession and attended to the spiritual needs of his patients, but was actually obliged to collect funds from the natives to enable him to carry on his work.

TRUSTWORTHY OINTMENT BASES FOR ANTISEPTIC USE.

AN important contribution relating to the actual disinfectant or antiseptic value of ointments has recently been published by Dr. Breslauer. Several well-known ointment bases containing various antiseptics were employed in experiments and their efficacy adjudged by their effects upon the bacillus prodigiosus and the staphylococcus pyogenes aureus. It was found that the latter organism survived

immersion in ordinary carbolised oil (5 per cent. carbolic acid) for three days, in carbolised vaselin only one day, in fat four hours, in lanolin thirty minutes, and in unguentum leniens twenty minutes. Similar results were obtained in experiments with other organisms as well as with other antiseptic agents. Unguentum benzoatum and unguentum precipitatum proved to be powerfully antiseptic, while unguentum zinci exerted no germicidal action whatever. It would thus appear that the only trustworthy ointment bases for antiseptic purposes are those which contain or which will absorb water, as does lanolin or cold cream. It is desirable, of course, also, that the oil or fat employed should be free from any tendency to become rancid, since it is known that zinc ointment in cases where the fatty vehicle has become rancid has proved a dangerous application to open sores, possibly because of the presence of staphylococcus pyogenes aureus. The interesting results which Dr. Breslauer has obtained suggest that the oleaginous particles of certain bases serve as an effective barrier between the active antiseptic agent and the organism. This explanation is the more probable since the best germicidal effects were obtained when fats or oils containing moisture were employed; besides which, experiments have been set on foot which have shown, in the case of carbolised oil, for example, that the oil remained intact and had not volatilised or undergone any change.

SUCCESSFUL REMOVAL OF A CEREBRAL TUMOUR.

THERE is, we believe, an impression abroad that cerebral surgery has undergone an eclipse, and, while it is true that our hopes and expectations with reference to it are less sanguine than they were a few years ago, yet much is still being done, and in not a few instances the operations are crowned with a success which is in the highest degree gratifying. In the last number of the *Neurologisches Centralblatt* an abstract of a case published by Dr. Gajkiewicz is given, and it is especially interesting and important, because apparently the tumour removed was a syphilitic one. The patient had no obvious signs of syphilis, but complained of constant severe pain in the right temporal region, increased by pressure or tapping. Ten years before he had received an injury to the right frontal region, and two months before an injury to the right temporal region, which had apparently been the starting-point of the present pain. He had typical attacks of left-sided Jacksonian epilepsy, with subsequent weakness of that side of the body. The fits always commenced in the upper extremity, and were frequently ushered in and accompanied by a feeling of pain, heat, and burning. The optic discs were a little obscured and the veins very large. There were enlarged glands in the neck, and a few months before there had been a swelling on the skull which had spontaneously disappeared. Energetic antisyphilitic treatment produced only temporary improvement, which was followed by an increase in the intensity of the symptoms. The attacks became more frequent and more severe, and were often accompanied by loss of consciousness. Trephining was performed over the right hemisphere at a point corresponding to the centre for the upper limb and face. A tumour was removed, which microscopic examination showed to be gummatous. After this, as many of the slighter symptoms still persisted, antisyphilitic treatment was again pushed and the patient completely recovered from all his symptoms.

THE "SOUGHS" OF DERBYSHIRE.

Now that the cry for more and better water is being raised in all the larger towns Dr. Barwise's report on the "soughs" or old drains of the disused lead mines in the Peak district, though of specially local interest, is suggestive of the probable existence of untried sources of like extent in other parts of the mountain limestone. At present these soughs have not been impounded and appropriated for the supply of towns while still uncontaminated by sewage and factory wastes, but are allowed to run off into the Derwent and other rivers, though they might be utilised with the minimum of expense, yielding enormous volumes of water at altitudes rendering pumping unnecessary. The "Magpie Level," which empties into the Wye near Bakewell, yields 9,000,000 gallons daily, and the "Hill Car Sough" pours 6,000,000 gallons into the Derwent near Rowsley. The "Merebrook Sough" discharges 13,000,000 gallons a day into this river near Ambergate, and the "Wakebridge Sough" close by 4,000,000 gallons, though this last is almost a thermal spring, having a temperature of 62° F. These four alone would afford an ample supply for a population of over a million persons, and would be a special boon to the rural district authorities, to whom costly waterworks are an impossibility. Though derived from worked-out lead mines, the waters are entirely free from that metal, probably because the lead which remains is in an insoluble form, at any rate in waters of such hardness; whereas the peaty waters of the Yorkshire moors are notorious for their solvent action on lead pipes. In these soughs there are wells already sunk, but, as geologists know well, the mountain limestone everywhere contains vast subterranean reservoirs of splendid water, which have only to be found and tapped to yield rich supplies distributable by gravitation. It was one of these which flooded the Severn Tunnel when in course of construction, and which has ever since been allowed to run to waste into the tidal river. Mountain and moorland districts, while providing excellent collecting areas, are for the most part so remote from the great centres of population that the low price at which the land or water rights can be secured is counterbalanced by the cost of conveyance through conduits of perhaps a hundred miles in length; and to neglect natural sources of water of undoubted purity, while vainly attempting to purify that taken from sewage-polluted rivers, is culpable and utterly unreasonable.

THE town council at their last meeting elected to the post of medical officer of health and public analyst for the borough of Leicester, in place of Mr. Joseph Priestley, B.A., M.D., D.P.H. (now medical officer of health of Lambeth), Mr. H. G. H. Monk, M.R.C.S., L.S.A., D.P.H., Mr. Monk is at present medical officer of health and public analyst of Scarborough, a position he has held for the last three years, and he was formerly assistant to Dr. Thursfield, medical officer of health of Shropshire county.

THE Abernethian Society of St. Bartholomew's Hospital will open its 101st session on Thursday, Oct. 10th, when Dr. Church will deliver the introductory address at 8 P.M. in the Anatomical Theatre. The subject will be the Rise of Physiology in England and its Effect on the Practice of Medicine.

THE annual dinner of past and present students of Charing-cross Hospital will be held in King's Hall, Holborn Restaurant (Newton-street entrance), on Wednesday, Oct. 23rd, at 6.30 for 7 P.M., when Mr. C. Jerome Woollett, M.B. Lond., F.R.C.S. Eng., will take the chair.

THE President will not deliver the Presidential Address at the first meeting of the Pathological Society on Oct. 15th. He proposes to deliver his address next year, when the society will celebrate its fiftieth anniversary.

AT a recent meeting of the trustees of Jefferson Medical College, Philadelphia, the honorary degree of LL.D. was conferred on Dr. John Collins Warren, Professor of Surgery in Harvard University.

OPENING OF THE MEDICAL SCHOOLS.

MOST of the London medical schools, whether the formal introductory address to students has fallen into desuetude or no, have inaugurated their winter session with a dinner, attended by the past and present students, or by some other social gathering. We give a brief account of the proceedings.

ST. GEORGE'S HOSPITAL.

The annual dinner of the St. George's Hospital Medical School took place at the Whitehall Rooms, Hôtel Métropole, on Oct. 1st. Mr. George Pollock (the orator of the day), Mr. Holmes (the treasurer of the hospital), Dr. Howship Dickinson, a large number of the medical staff, and several influential governors were present, together with a large and representative gathering of past and present students. Dr. Blandford was in the chair, and conducted the proceedings with great tact and eloquence. The usual patriotic toasts and those of "The Governors," "The Medical School," "Past and Present Students," &c., were received with enthusiasm. Dr. Dickinson spoke of the immense amount of work done by the school for the hospital, and suggested that at least the governors should give it house-room in return. Mr. Holmes said that the relations of the governors and the school were of the utmost cordiality, and referred the previous speaker to the quarterly court. He then spoke of his delight in being able to serve the hospital as treasurer now that he was no longer on the active staff. Mr. Warrington Haward dwelt on the admirable and unostentatious work done by the resident hospital staff, and pointed out that often enough the conducting of a serious case to a successful issue was really due more to the assiduous care of the house surgeon and nurses, than to the efforts of the surgeon in charge whose name figured above the bed. Dr. Isambard Owen, the dean of the school, spoke of the flourishing state of that institution. The examination results were highly satisfactory, and the athletic record deserved great praise. The present entry was very large, and might even break the record. It was stated that the Directory of St. George's Hospital men was ready, and would shortly be published. In looking up the lists of past house surgeons for publication the first name found was that of John Hunter. A most enjoyable and enthusiastic evening was brought to a close by a musical sketch, admirably given by Mr. Mercer Adam, a sometime student.

LONDON HOSPITAL.

The Old Students' Annual Dinner was held on Oct. 1st at the Criterion Restaurant instead of, as in former years, in the library of the London Hospital Medical College. About 130 attended the dinner. In the unavoidable absence of Mr. Couper, who was to have presided, the chair was taken by Dr. Stephen Mackenzie. In proposing the toast of the evening, he mentioned the fact that the present session was the 111th anniversary of the opening of the London Hospital Medical School. He briefly traced the progress of the medical school as evidenced by the successive occasions on which it had been found necessary to enlarge the college buildings, especially in 1854, 1871, 1879, and 1885. Quite recently the physiological laboratory had been doubled in size. He referred at some length to the question of medical education in London, and advocated the endowment of medical teaching. Mr. Treves followed with an amusing speech, in which he ridiculed the notion that the opening of the winter session could be properly marked by so frivolous a process as eating, and humorously suggested that the occasion would be more fittingly celebrated by a procession of the staff, students, and nurses, in fancy dress, along the Mile End-road. Old London Hospital men who were unable to be present at the dinner will be glad to know that the entry for the summer session was greater than on any previous occasion and that for the present session very much greater than at the corresponding period last year.

ST. BARTHOLOMEW'S HOSPITAL.

The annual old students' dinner was held on Oct. 1st in the great hall of the hospital, the number of guests being about 125. The chair was taken by Mr. Howard Marsh. After the usual loyal toasts the chairman proposed "The Health of the Hospital and School" in an amusing speech, in which he compared the hospital routine of the present day with that of the Middle Ages. Dr. Hensley also, in responding to the toast of his health, afforded the company an intellectual treat. Among the guests present were Sir James Paget, Sir George Humphry, Professor Burdon Sanderson, Professor Clifford Allbutt, the Dean of Christchurch, the Master of Downing, Dr. Rutherford, headmaster of Westminster School, and Sir Trevor Lawrence. Several of these also spoke.

WESTMINSTER HOSPITAL MEDICAL SCHOOL.

The introductory lecture was given at 4 P.M. by Dr. Monckton Copeman, which was followed by a report from the dean, Mr. Spencer. Owing to the enforced absence of Viscount Peel, the prizes were distributed by Dr. Potter, who concluded with a few happy remarks to the students. The annual dinner of the medical school took place at the Café Monico on Tuesday, Oct. 1st. The chair was taken by Dr. de Havilland Hall, physician to the hospital. As usual, most of the members of the staff were present, and the House Committee was represented by Mr. G. G. Tremlett, who with Mr. W. G. Spencer, the dean of the medical school, responded to the toast of "The Medical School and Hospital," which was proposed by the chairman. The other toasts were "Royalty," "The Old Students," and "The Chairman." The proceedings were enlivened by the strains of a string band, and the result was a most satisfactory evening's entertainment.

UNIVERSITY COLLEGE HOSPITAL.

The annual dinner of the past and present students of this hospital was held at the Hôtel Métropole on Tuesday, Oct. 1st, Sir Richard Quain, F.R.S., being in the chair. The gathering was a very successful one. The President of the General Medical Council was supported by the President of the Royal College of Physicians of London and the President of the Royal College of Surgeons of England, and it is a remarkable coincidence that all three Presidents were either connected with University College Hospital in the past or are at the present time. The chairman, in giving the toast of the evening, remarked that he had entered as a student when the hospital had only been three years in existence, and gave some interesting reminiscences of a number of distinguished men who had been connected with it. He said that University College had exercised an important influence on medical education generally, for not only had its methods of teaching been largely imitated, but at the present time no less than thirty-six former alumni of University College were teachers in other metropolitan medical schools.

MIDDLESEX HOSPITAL.

The annual festival was held on Oct. 1st at the Café Royal and was a great success. There was a very large attendance of old and present students and Dr. Cecil Y. Biss was in the chair. After the customary toasts of "The Queen and Royal Family" and "The Services" Dr. Biss proposed the toast "The Middlesex Hospital and Medical School." He alluded to the necessity of a close connexion between these two elements and felt sure that under the present circumstances the sympathies of the two were becoming closely bound up in each other. He alluded to the energies of the chairmen of the hospital, mentioning the names of Mr. Ross, Lord Sandhurst, and the present chairman, Sir Ralph Thompson. Some allusion was also made to the great loss which the hospital has sustained in the death of Mr. Hulke, and also to another gap which will soon occur by the contemplated retirement of Mr. Lawson. Dr. Biss, however, expressed his full belief in the future prosperity of Middlesex Hospital, and mentioned some of the great improvements which have lately taken place, among which may be mentioned the new operating theatre, the new convalescent home, and the erection of new cancer wards. Sir Ralph Thompson, in reply, fully endorsed Dr. Biss's remarks, and expressed his great desire to see a close bond of sympathy between the lay and medical workers of the hospital. He also referred to the efficient working of the hospital, for which much credit was due to Mr. Farden, Mr. Melhado, and Miss Thorold. Mr. Pearce Gould also replied to the chairman's toast, and referred to the many improvements in medical teaching which have taken place in the last few years, and regretted that the scheme for a new University for London had not made more definite progress. "The Past and Present Students" was ably proposed by Mr. Lowne. Dr. Newman, in reply for the past students, expressed his great satisfaction at seeing so many old students there, and expressed the confidence he

felt in recommending fresh students to go under the care of the present staff. Mr. Braine Hartnell, for the present students, gave a good account of the state of the school both in games and work. In thanking the staff for all their help and kindness, he ventured to suggest the hope that they would see their way to abolish the fee which is now paid on holding resident appointments, which he thought fell as a burden on many students. In alluding to the games he gave a brief account of the past doings, and expressed a belief and hope that the athletic side of the school was constantly improving. Dr. Duncan proposed "The Visitors," coupled with the name of Mr. Ganz, who has been such a regular visitor to the Middlesex Hospital dinners for so many years. Mr. Ganz expressed his thanks for himself and the other visitors, and said what a great pleasure these meetings gave him, and that he always was very pleased to come. Dr. Douglas Powell proposed the health of the chairman, and alluded to the long connexion and valuable services which Dr. Biss has rendered to the Middlesex Hospital. This toast, the last of the evening, was enthusiastically responded to and a very pleasant evening was terminated. Much of the success of the evening was due to the charming music rendered at intervals by Mr. Bernard Law, Signor Giuseppe Maggi, Mr. Irving, Mr. Myler, and Mr. Wilhelm Ganz.

KING'S COLLEGE HOSPITAL.

The annual dinner of the old students of King's College Hospital was held at Limmer's Hotel on Tuesday, Oct. 1st, and formed a pleasant inaugural meeting for the commencement of the session. Dr. Robert Shingleton Smith of Bristol occupied the chair, and he was supported by a very large and representative gathering of old students of all ages. In proposing the toast of the evening, "Success to King's College Hospital and its Medical School," Dr. Shingleton Smith said that it was most satisfactory to look around and consider the great distances men did not mind travelling to attend these dinners. There were representatives from Yorkshire, from Exeter, from Bristol, from Birmingham, and from Tredegar; they came not only to meet old friends, but to hear their accounts of others who might not be present, and to rejoice in their successes and in the lustre they conferred upon King's College even when shining from a distance. As recent causes of congratulation he instanced the election of Mr. Christopher Heath as President of the Royal College of Surgeons of England, of Dr. Brodie as Lecturer on Physiology at St. Thomas's Hospital, and of Sir Joseph Lister as President of the British Association for the next annual meeting. In felicitous terms he mentioned the use of the College buildings for the recent meeting of the British Medical Association, the large hall having been used for the reception-room. After many reminiscences of his own student days he concluded by referring to the King's College Hospital Reports, which already included subscribers from India, China, Australia, and Hawaii. Deputy-Surgeon-General Jessop responded to the toast of "The Army, Navy, and Reserve Forces," and speeches were also made by the Rev. Dr. Wace, Dr. Lionel Beale, Dr. Allfrey of St. Leonards, Mr. Richardson Cross of Bristol, Dr. Playfair, and Dr. Curnow. During the evening Mr. Percy L. Webster and Mr. A. Schartau contributed a selection of songs which were much appreciated.

ST. THOMAS'S HOSPITAL MEDICAL SCHOOL.

At 3 P.M. on Wednesday, Oct. 2nd, there was a large gathering in the Governors' Hall of those interested in the school and hospital, when the prizes and certificates of the past year were distributed by Sir Edwin Arnold, K.C.S.I. After the distribution of the prizes Sir Edwin Arnold gave a brilliant address, which was much appreciated, and which is published in another column of our present issue. The annual dinner of old and present students was held in the evening, at 7 P.M., at the Whitehall Rooms of the Hôtel Métropole. Dr. Payne was in the chair, and about 140 persons were present, including guests. The speeches were good and the toast list not too long. After the usual loyal toast, Dr. T. B. Crosby proposed "St. Thomas's Hospital and Medical School (past and present)," which was acknowledged by the Treasurer of the Hospital (Mr. Wainewright), the Dean of the Medical School, Mr. Makins, and Mr. George Rice Ord. Dr. W. M. Ord proposed "The Chairman," a toast heartily received, and Dr. Payne replied. Mr. W. H. C. Staveley proposed "The Hon. Secretaries," and Dr. Toller and Mr. Abbott replied. The dinner was a great success, and the arrangements reflect great credit on the secretaries.

ST. MARY'S HOSPITAL MEDICAL SCHOOL.

The dinner of the past and present students was held at the King's Hall, Holborn Restaurant, on Oct. 1st. Mr. Malcolm Morris presided. Among those present were Sir William Broadbent, Mr. Norton, Dr. Cheadle, Mr. Edmund Owen, Dr. McCall Anderson, General Shaw Stewart, R.E., Colonel Bird, Mr. Page, Dr. Lees, Mr. Critchett, Mr. Silcock, Dr. Phillips, Major Hanbury White, R.E., Dr. Danford Thomas, Mr. John Moore, J.P., Dr. Luff, Surgeon-General Jeffcoat, Mr. Hetherington, Dr. Franklin Parsons, Mr. Havell, Dr. Walter, F.R.S., Dr. Symes Thompson, Dr. Handfield Jones, Surgeon-Major Hayes, Surgeon-Captain G. E. Hale, &c. The chairman proposed "The Navy, Army, and Reserve Forces," and the toast was responded to by Fleet-Surgeon T. J. Preston, R.N., Brigade-Surgeon-Lieutenant-Colonel Myers, and Surgeon-Lieutenant-Colonel Norton. The chairman, in proposing the toast of the evening, gave an amusing sketch of an interview between an old student of thirty years ago and one of the present time, showing the vast change in the class of men who now enter the profession. St. Mary's had increased in numbers, and this was due to the energy of the Dean (Mr. Field). The Dean replied and Dr. Wills responded for the "Past" and Mr. Thorne for the "Present Students." The staff was represented by Sir William Broadbent, who proposed the chairman's health. A delightful evening was brought to a close by an excellent selection of music and songs by Messrs. Schartau, Fell, Appleby, Bradford, and J. E. Lane, and a ventriloquial sketch by Mr. F. Russell.

ROYAL VETERINARY COLLEGE.

Professor Penberthy, who delivered the introductory address at the Royal Veterinary College, said the systematic teaching of veterinary science in Great Britain dated from the foundation of the college in 1791 by Vial de St. Bel, a French veterinary surgeon. In its infancy the interests of the school were fostered and its honour added to by the cöoperation of the most eminent medical men. Justifiable pride mingled with grateful sentiment while acknowledging the indebtedness of the college and profession to the early examining committee, whose roll was adorned by such names as Astley Cooper, Blizzard, Horne, J. Abernethy, Brodie, C. Bell, J. H. Green, and Coleman. Referring to the bearing of veterinary science on the welfare of the general community, Professor Penberthy remarked that before the establishment of a State veterinary department and the adoption of the teachings of veterinary science, an invasion of cattle plague reduced the financial resources of the country to the extent of millions of pounds. An incursion of sheep-pox was scarcely less costly. Foot-and-mouth disease in some years affected nearly 700,000 animals. Pleuro-pneumonia for a long time cost the country little short of £50,000 annually. Those affections were now regarded as exotic, but kept from our shores only by strict adherence to the teachings of veterinary science. If the protection provided by veterinary knowledge were withdrawn, the flickering light of agriculture, the leading industry of this country, could scarce escape extinction. Under the watchful care of a veterinary department, the supply of cheap animal food was assured to the people without danger of special loss to one part of the community from the invasion of imported contagious disease, for until within a few years of the formation of the Department the law prohibited the importation of live stock. Under all these circumstances it was a cause for wonder that the act of any Government should appear to hold its worth so cheap as to extirpate the word veterinary, which has described the Department for thirty years, and to render it appparently subordinate and declining in value. By increased knowledge of animals and their diseases, by use of anæsthetics and improved methods in surgery, animal suffering had been materially lessened and animal service increased.

UNIVERSITY OF DURHAM COLLEGE OF MEDICINE.

The opening of the session took place in Newcastle-upon-Tyne on Tuesday, Oct. 1st. The meeting was presided over by the President of the College of Medicine, and there was a large attendance of the public interested in the college. The Warden of the University (the Very Reverend Dr. Kitchin, Dean of Durham) distributed the prizes and scholarships to the successful students. The Mayor, Sheriff, and other members

of the corporation were present, and among the guests were the heads of houses and other dons from Durham, the Principal of the Durham College of Science, the High Sheriff of Durham, the Nestor of the Profession in Newcastle, Dr. Embleton, the Mayor of Durham, Dr. Jepson, and many other well-known and prominent citizens. The students were, as usual, very much in evidence, but on the whole the proceedings passed off unusually quietly. The President, Professor Philipson, after welcoming the warden on his first appearance at an opening of the College of Medicine, alluded to the new charter enabling the University to grant degrees in medicine and in all the other faculties, with the exception of Divinity, to women, and to hold convocations in Newcastle. He announced that the first convocation would be held in the examination hall of the College of Medicine in April next.

On Tuesday evening, at the Hôtel Métropole, Newcastle-upon-Tyne, some eighty old students of the University of Durham College of Medicine dined together. Professor Arnison, who, with the exception of Mr. J. A. Angus, was the oldest student present, presided, and a very pleasant evening was spent. Much credit is due to Dr. W. D. Arnison and to Mr. Walter Ridley, the secretaries of the dinner committee, for the admirable way in which the arrangements were carried out, and it is hoped the dinner will become an annual one.

LIVERPOOL UNIVERSITY COLLEGE.

The opening of the winter session of the Medical Faculty of the Liverpool University College took place on the 1st inst., under most favourable auspices. Lord Derby, the President of the College, presided, and was supported on the platform by the Lord Mayor of Liverpool (Mr. W. H. Watts), Mr. Edward Lawrence, chairman of the council, the professors of the College, and leading citizens. There was also in addition to the students a large attendance of ladies and gentlemen. Professor Paterson, the Dean of the Medical Faculty, presented his report, which indicated considerable activity in the growth of the Faculty during the last twelve months. The number of students attending classes in the winter session, excluding those taking out hospital practice alone, was 146. During the winter session the new entries were 56, and during the summer session the numbers were 127, including six new entries and seven new entries for special courses. The two facts noticeable on making up this summary were that the numbers in the school generally were practically stationary, the number of diploma students was diminishing, while the number of university and dental students was increasing. In this connexion it might be added that a very desirable addition to the attractions of the school would be the establishment of a hall of residence within easy reach of the college. Summarising the results of professional examinations, 118 students had passed examinations—108 medical, 10 dental. Lord Derby then distributed the medals and prizes awarded by the Medical Faculty.

CALENDAR OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

THE annual Calendar has just been published by the Council of the College. It shows that there are 1160 Fellows on the roll of the College (against 1144 last year), of whom 947 obtained the Fellowship by examination, 16 were elected as Members of twenty years' standing under Section 5 of cap. 15 Vict., and 2 are *ad eundem* Fellows. There are 16,816 Members and 645 Licentiates in Midwifery. The Licentiates in Dental Surgery are stated to number 1007. The holders of the diploma of Public Health number 215.

During the past collegiate year 577 candidates presented themselves for examination in Elementary Anatomy, of whom 473 passed and 104 were referred; 82 candidates presented themselves in Elementary Physiology, 55 of whom passed and 27 were referred; 488 candidates presented themselves in Elementary Biology, of whom 327 passed and 161 were referred. The examiners are appointed in conjunction with the Royal College of Physicians of London, under the scheme for an Examining Board in England. The fees paid by candidates for these examinations amount to £2991 3*s.* 9*d.*, the examiners receiving in fees £431 5*s.* Of 609 candidates who presented themselves in Chemistry, 355 passed and 254 were referred; in Materia Medica, of 258 candidates 178 passed and 80 were referred; in Practical Pharmacy, of 226 candidates 181 passed and 45 were referred. The examiners in Chemistry, Materia Medica, and Practical Pharmacy are elected by the Royal College of Physicians of London.

The examiners in Anatomy and Physiology for the Second Examination are appointed in conjunction with the Royal College of Physicians of London; they have conducted the Primary Examination under the old regulations as well as the Second Examination of the Examining Board in England; 811 candidates presented themselves for examination in Anatomy, of whom 433 passed and 378 were referred; 803 presented themselves in Physiology, 454 of whom passed and 349 were referred. The fees paid by candidates for examination amounted to £3726 9*s.*, the examiners receiving £1329 2*s.*

The Board of Examiners in Anatomy and Physiology for the diploma of Fellow, elected annually by the Council, held two meetings for the examination of 171 candidates, of whom only 63 passed, whilst 108 were referred. The fees received amounted to £1050, of which the Board received £684.

The Court of Examiners, ten in number, are elected by the Council from the Fellows of the College only, for a period of five years. They conduct the Third or Final Examination in Surgery of the Examining Board in England as well as the Second or Final Examination for the diploma of Fellow. During the past collegiate year the Court held two examinations for the Fellowship and four for the Membership; at the former there were 79 candidates, 45 of whom passed, 4 were referred for one year, and 30 for six months. For the Membership 937 candidates presented themselves in Surgery, of whom 579 passed and 378 were referred. The fees paid by candidates amounted to £10,142 3*s.*, and the fees paid to the Court of Examiners and the examiners in Midwifery amounted to £5697 13*s.* The examiners in Medicine under the scheme are elected by the Royal College of Physicians of London. Of 905 candidates examined, 521 passed and 384 were referred. The examiners in Midwifery are appointed in conjunction with the Royal College of Physicians of London, and have examined 824 canddates, of whom 558 passed and 266 were referred.

The Board of Examiners in Dental Surgery have held two meetings for the examination of 121 candidates, 84 of whom received the diploma and 37 were referred. The fees paid by candidates amounted to £882, the Board receiving £512 8*s.*

The examiners in Public Health, appointed in conjunction with the Royal College of Physicians of London, examined 53 candidates in Part I., 35 of whom passed and 18 were referred; in Part II., out of 46 candidates 26 received the diploma and 20 were referred. The fees received for both parts amounted to £234 13*s.* 6*d.*, the examiners receiving £186.

With regard to the finances of the College, it appears that the income from all sources amounted to £28,490 8*s.*, the largest item being derived from the fees paid by candidates for the diplomas of the College—viz., £18,791 15*s.* 9*d.*—the next largest item being from dividends on the Erasmus Wilson bequest, £4813 16*s.* 1*d.*; rents from chambers adjoining the College produce, £750; investments, £750 2*s.* 8*d.*; hire of rooms and sale of questions at Examination Hall, £680 17*s.* 3*d.*; fees retained for referred candidates, £334; from trust funds. £279 9*s.* 5*d.*; incidental receipts, sale of calendars, &c., £14 1*s.*; sinking fund, £2 5*s.* 11*d.*; Goldsmiths' Company Research grant, £500; balance at bankers, 1894, £1578 0*s.* 2*d.*

The expenses for the year amount to £27,760 11*s.* 3*d.* (leaving a balance at the bankers of £729 16*s.* 9*d.*), the largest item being for fees to examiners, £8840 8*s.*; expenses of examinations (Fellowship and dental only), £342 7*s.* 1*d.*; half expenses examination hall, £4519 9*s.* 5*d.*; half expenses, research laboratories, £825 18*s.* 11*d.*; rates, taxes, and insurance, £1540 12*s.* 10*d.*; extraordinary expenses, £298 1*s.* 10*d.*; alterations and repairs, £669 5*s.* 8*d.*; fees to Council, £240 9*s.*; salaries, wages, and pensions in the three departments (museum, library, and College), £4693 6*s.* 2*d.*; lectures, catalogues, specimens, &c., for museum, £673 11*s.* 9*d.*; purchase of books, &c., for library, £653 9*s.* 4*d.*; trust funds, £302 3*s.* 10*d.*; fees returned to candidates, £556 10*s.*; purchase of stock, £2150 15*s.* 7*d.*; expenses, Metropolitan Asylums Board (repayable) £186 5*s.* 9*d.*; miscellaneous items—i.e., fuel, light, printing, stationery, &c.—£1267 17*s.* 11*d.*

From the librarian's report it appears that the supply of new books has been well kept up during the present year,

The donations include the MS. material for a Greek medical lexicon prepared by the late Dr. Greenhill (presented by Miss Greenhill), a collection of pamphlets from Sir Henry Acland, several old books from Mr. Alfred Kisch, and a MS. report of John Hunter's lectures from Mr. C. Leeson Prince. The copper and steel plates used for printing Mr. Joseph Swan's book on the "Nervous System" have been presented by Mrs. J. V. Machin of Gateford Hill, Worksop. Exchanges have been made with the British Medical Association and the Medical Society of Victoria. Amongst the old books purchased may be mentioned a copy of the rare (1672) "Treatise of Wounds" by Richard Wiseman. The collection of portraits has received a valuable addition from Mr. Jabez Hogg in the shape of a series of daguerreotypes of eminent physicians and surgeons taken by him nearly fifty years ago. Mr. Hogg has also presented a portrait in oil of a surgeon (name unknown), dated 167*l*, and several volumes of interesting pamphlets. Including journals and Transactions the total number of volumes in the library is about 48,000.

Amongst the additions to the Museum may be mentioned a sarcoma of the patella; a roll of hair weighing five pounds successfully removed by operation from the stomach; and an enlarged spleen in a child, which weighed one-sixth of the whole body's weight. Mr. Willoughby presented a humerus taken from an Egyptian skeleton dated about 4000 B.C., and in addition to its antiquity it is of interest as showing an old injury to the head of the bone which must have produced considerable deformity of the limb. An important addition to the Museum is that of 205 skulls and crania, with 40 models, purchased from the Anthropological Society.

The Secretary's report deals with the following subjects:, an abstract of the work done by the Council and committees; the work of the Committee of Management of the two Royal Colleges; particulars concerning the Research Laboratories on the Victoria Embankment; reports of meetings of Fellows and Members; results of elections &c.

MEDICO-PSYCHOLOGICAL ASSOCIATION OF GREAT BRITAIN AND IRELAND.

THE fifty-fourth annual meeting of the Medico-Psychological Association of Great Britain and Ireland was held on July 25th and 26th, under the presidency of Dr. D. Nicolson, at the rooms of the Association, 11, Chandos-street, Cavendish-square. The proceedings commenced at eleven o'clock on the first day with the election of officers and the transaction of general business. Dr. H. Rayner was elected Editor of the *Journal of Mental Science* in place of the late Dr. Hack Tuke, and it was decided that the Association should be incorporated. In the afternoon the President took the chair and after presenting an illustrated memorial and silver bowl to Dr. J. H. Paul, who had been treasurer of the Association for thirty-one years, delivered an address on Crime, Criminals, and Criminal Lunatics. His remarks on crime, interesting in themselves, were rendered still more so by a number of statistical tables. He did not believe that men who became criminals were born so and could not help themselves. From his experience as a prison medical officer many years ago he was of opinion that, though there were a certain number of weak-minded criminals who in the face of temptation were unable to resist it and thereby became criminal, yet in the large majority of cases criminality shows itself as a positive propensity to evil-doing. Cases like these are not unintelligent and are quite capable of balancing motives, but deliberately, and in spite of their consciousness of its risk, prefer crime to an honest livelihood. He agreed with a large part of the phraseology and descriptions which Lombroso and others had given, but these descriptions applied to a minority of criminals only. He objected to a description which was applicable to the few being held up to the world as a description applicable to the characteristics of the whole body. He denied that there was such a thing as a criminal neurosis or instinctive criminality that belongs to a group of persons who make themselves amenable to the law. — Sir Edmund du Cane, Dr. Orange, Dr. Clouston, and Mr. Conolly Norman discussed the views set forth in the address, and the President replied.

Dr. Rivers then read a paper on Experimental Psychology in relation to Insanity, illustrated by an apparatus for measuring choice time. He mentioned that Professor Kräpellin of Heidelberg and his pupils had for some time been working on the application of methods of measuring mental capacity in cases of insanity, and the method he would show would be one of those which Professor Kräpellin used. His methods, to a great extent, resolved themselves into time measurement. The means of measuring work done is to a great extent to measure the time which it takes and the amount of work which can be done in a certain time. Another branch of Professor Kräpellin's work is the investigation of abnormal influences, such as drugs, overwork, and excessive fatigue, on normal people. These abnormal influences are not only recognised causes of insanity, but some of them, such as alcohol, produce conditions identical with those in many forms of insanity. In investigating the effects of these abnormal conditions we are investigating artificial insanities in their earliest stages at a time when they do not come under the notice of the physician. With the assistance of one of the members Dr. Rivers then proceeded to demonstrate the method of measuring choice time which he had described.—The President, Dr. H. Rayner, Dr. Percy Smith, Dr. D. Yellowlees, and Dr. A. R. Urquhart discussed the paper, and Dr. Rivers replied.

On July 26th Dr. Clouston and Dr. Batty Tuke opened a discussion on Rest and Exercise in the Treatment of Insanity. Dr. Clouston was strongly in favour of exercise, as it produced sleep, calmed maniacal and melancholic excitement, and improved the working of the secretory and excretory glandular system. In addition, it promoted healthy metabolism and nutrition, and stimulated the blood-forming glands and apparatus by the circulation of an increased amount of oxygen in the blood. Rest, in the sense of staying in bed for twenty-four hours, he had seen do harm, and was applicable as a therapeutic agent only in cases of extreme neurasthenia, in exhausted conditions such as the puerperal state, and in those suffering from bodily diseases and who are clearly exhausted from over-exertion. Muscular exercise produced brain rest and was the most efficient way of obtaining it. By putting the muscles into exercise we act by way of a derivative from the excited cortex and secure brain rest in a physiological fashion.—Dr. Batty Tuke maintained that in cases of insanity from over-exertion there was hyperæmia of the brain cortex, and that the congestion is properly and rightly treated by rest. He referred to the condition of the brain cells found in the honey-bee in the evening after a hard day's work contrasted with the conditions which are seen in the morning, and maintained that what is wanted in the treatment of the insane is to give rest so that the congestion may be diminished and the cell be renourished and able to return to its original condition. He quoted statistics of forty cases of incipient insanity, half of whom recovered within three weeks and the rest within six weeks under his treatment.—The President, Dr. Rayner, Dr. Blandford, Dr. Rivers, Dr. Cooke, Dr. Drapes, Dr. Yellowlees, Dr. Andriezen, Dr. Urquhart, Dr. Savage, Mr. Conolly Norman, and Dr. Robertson discussed the papers, the conclusion being come to that the means of treatment are to be used with reference to the individual patient, and Dr. Clouston replied.

Dr. Turnbull read a paper entitled "Some Remarks on the Forcible Feeding of the Insane." He was of opinion that it was a mistake to wait until the patient became exhausted, and thought the best apparatus for feeding was the œsophageal tube. Considering the comparatively slight risk entailed, it should be oftener resorted to for the sake of the patient. No form of feeding, however, was absolutely safe unless due precaution was taken. — The President, Dr. Briscoe, Dr. Drapes, Dr. Clouston, Dr. Yellowlees, Dr. Macdonald, Dr. Merson, Dr. Robertson, Dr. Urquhart, Dr. Cooke, Dr. Carlyle Johnstone, Mr. Hayes Newington, Dr. Finegan, Dr. Outterson Wood, Dr. Tuke, Dr. A. S. Newington, Dr. Gramshaw, and Dr. Soutar discussed the paper, and Dr. Turnbull replied.

Dr. W. F. Robertson read a paper on the Pathology of Milkiness, Thickening, and Opacity of the Pia-Arachnoid in the Insane, and exhibited numerous microscopical specimens as an illustration to the paper.

Dr. G. E. Shuttleworth contributed a paper on Provision for Pauper Idiots and Imbeciles. He referred to the want of accommodation for this class of cases and mentioned that, besides the rate-supported institution at Darenth, there were in England only five other training schools, which were all kept up by voluntary contributions. A block for idiots has been erected at the Northampton Asylum, and similar blocks were

contemplated at two other asylums, but further accommodation was urgently needed. He advocated the erection of institutions, if necessary by a combination of counties, or the erection of separate blocks in connexion with the existing county or borough asylums.—Dr. Fletcher Beach made some remarks on the paper.

Dr. Clouston read for Dr. L. C. Bruce a paper on Thyroid Feeding. Dr. Bruce advocated its use in (1) cases of melancholia whose improvement had been arrested; (2) cases of mania showing signs of dementia; and (3) cases of stupor at an early stage, in which the effect was to wake them up. The treatment had also been tried on general paralytics and on patients suffering from dementia of forty years' duration. Five-grain tabloids were used, but the heart's action had to be watched and the patient kept in bed all the time in case of heart failure.—Dr. Fletcher Beach made some remarks on this paper.

Dr. Dawson brought forward a paper on a very rare case of Ecchymosis following Insane Excitement, which was discussed by the President, Dr. A. R. Urquhart, and Dr. T. W. McDowall.

On the evening of July 26th the annual dinner took place at the Whitehall Rooms, Hôtel Métropole, Dr. D. Nicolson, president, being in the chair. The loyal toasts having been duly honoured, the President proposed "The Navy, Army, and Auxiliary Forces," to which Major Macbean (in the absence of Sir Frederick Middleton) and Dr. J. H. Paul, ex-treasurer, responded. To the toast of "The Legal Administration," proposed by Dr. Yellowlees, Sir John Bridge, Mr. Kenelm Digby, and Dr. F. Needham replied. The toast of "The Medico-Psychological Association" was proposed by the Right Hon. the Speaker of the House of Commons, who remarked that in the course of the present century enormous steps had been taken in the humane treatment of lunatics. He was glad to hear that the Association had specially taken in hand the training and education of competent nurses and attendants on the insane. He was also glad to hear that the Association was flourishing, that its membership was steadily increasing, and that its members were to be found throughout the whole of their vast empire. The President, in responding, remarked that with regard to the future he was glad to say they had had during their meetings an illustration of the capacity of the rising members of their specialty for taking up the work that had been handed to them. Other toasts followed.

On Saturday, July 27th, the President invited the members to Broadmoor, where the wards and manner of treatment of the patients were fully described. On the following Monday the members paid a visit to the Holloway Sanatorium on the invitation of Dr. Rees Philipps, some of the members afterwards paying a visit to Windsor. Dr. and Mrs. J. Chambers gave a garden-party at the Priory, Roehampton, on Tuesday, July 30th, thus closing a very interesting and successful meeting.

HABITUAL DRUNKARDS AND THEIR RETREATS.

THE fifteenth report of the Inspector of Retreats under the Inebriates Acts of 1879 and 1880 is before us and merits the serious attention of our readers. Such legislation originated with the profession, and if it is ever to be amended and put into an adequate and effective form it will largely be on the evidence and representation of medical men. The actual report before us is satisfactory as far as it goes, or can go, but like its predecessors it only suffices to show that we have touched the mere fringe of the subject and that our legislators have yet to accomplish anything worthy of the name of legislation for the recovery of persistent drunkards, who often have in them the materials of most capable and genial citizens. The existence of such persons is only too palpable, and yet there are greater numbers than would appear to the cursory observer. It is a lucky family that cannot count within its blood relationship an incorrigible and persistent drunkard who destroys his own health, loses his employment, and squanders the property which has been acquired, sometimes by his own industry and more often by that of his relatives, possibly his parents, and sometimes his wife. The reports of a scientific or even a rough investigation by competent persons into the habits of persistent drunkards would astonish the public and remove what little reluctance may still remain to deal effectively with them. Not only the number of such persons, but their prodigious powers of consumption, would surprise the uninitiated. A bottle of brandy a day or as much whisky, or two, or even, as in one case, four, may be consumed or procured for consumption, and such a system, with more or less interruption, may go on for years without let or hindrance from legislation, though, of course, it is as distinctly poisonous and suicidal in its effect as overdoses of arsenic or of phosphorus.

The contribution of our legislators to the correction of this evil so far consists in the Acts regulating retreats and the admission of patients into them. The feature of this legislation is that if habitual drunkards consent to their own treatment in these institutions before two magistrates they can be detained for a period not exceeding twelve months. There are nine such retreats, a new one having been licensed last year—Capel Lodge, licensed to Dr. Edward Norton for eight male patients, and situated between Folkestone and Dover. The others are situated at Chiswick, Folkestone, Fallowfield (Manchester), Kingswood Park, Dalrymple Home, Rickmansworth, and Westgate-on-Sea. Early in the present year Amesbury House, Amesbury, was licensed to Mr. J. J. Bancroft for the reception of three patients, two male and one female. In the nine retreats in the year 1894 the admissions during the year were 133, 4 more than in the previous year. With 87 remaining over from the previous year this makes a total of 220. Only one death occurred in the institutions from pericarditis—that of a woman shortly after her admission. The report of the inspector consists almost entirely of the reports sent to him by the licensees of the retreats. It is disappointing not to have some independent criticism by the inspector of the retreats himself. But this is conspicuous by its absence. The details given by the licensees are very much to the same effect as in previous years and go to show that the principle of these retreats is a sound one, and is really curative in a large proportion of the cases, the principle consisting in the detention of the patient for a considerable time—twelve months if possible—under conditions in which immediate and continuous abstention from alcohol is practicable, accompanied with other conditions of a regular and cheerful life. One of the most interesting reports is that of the licensee of Fallowfield, Manchester, an institution meant for women. The testimony here is explicit on two important points. The first is that habitual drunkenness in women is by no means a hopeless disease, as it is apt to be considered. It is reported that 25 per cent. of the cases give evidence of permanent recovery. When it is considered that the patients do not go into the retreat till, for the most part, they are in an advanced and otherwise hopeless stage of alcoholism, the proportion is a very creditable one. Four women who left in 1891 (the first year) still remain steadfast abstainers and are doing well in their several stations of life. Six who left in 1892 have stood firm, and nine who left in 1893. The other point testified to in this report is that no harm, but good, is done by the sudden and complete disuse of alcohol in such cases. The report of the Dalrymple Home is, as usual, one of the most instructive of the series. Since the opening 377 cases have been discharged, of which 177 have been under the Act and 200 private cases. The accommodation is far short of the demand, so that for every applicant admitted ten or fifteen have been refused either for want of accommodation in the retreat or of means in the patient. The occupation of patients is given. It is no matter for surprise that "gentlemen of no occupation" supply the largest number of the cases—85 out of 377. Merchants seem to supply the next largest number (41); clerks, 39; medical practitioners, 28, and medical students, 5; solicitors, 18. It is important to notice that in a large proportion of cases some other habit affecting the nervous system is associated with that of alcoholism. In 321 it was the use of tobacco, in 4 chloral and tobacco, in 4 morphia, in 2 morphia and cocaine, in 6 opium or chlorodyne and tobacco, and in 1 sulphonal. In 39 there was no other associated habit. It is gratifying to notice that in this retreat reports are received from old patients (number not stated) who after periods of from seven to ten years continue to be abstainers. The Kingswood Park report states that 42 per cent. of the patients discharged are doing well. The period for which these successful cases were detained lasted from six to twelve months, and their average age was forty-one years.

The unanimous burden of the reports is that there is

need of more retreats, especially for the poor, and that little more good can be expected from the retreat system until an amendment of the law, applying the compulsory principle to persistent drunkards, is procured. On this subject the medical profession is unanimous. A Bill is already being promoted on these lines in Vienna, and our readers will remember that a similar Bill passed a second reading in the House of Lords before the recent change of Ministry, and in spite of somewhat strong speeches against it by the present Lord Chancellor and Lord Salisbury. These statesmen are now in positions of great power and can indefinitely defer the much-needed legislation in the name of personal freedom. We do not doubt that they will see that this is no question of party politics, but one concerned with disease and urgent at that. Their opposition was directed against the methods of procuring the detention of persons rather than against the principle itself. They will have public and professional concurrence in any means for protecting the just liberty of the subject, but this can scarcely imply a right to the habitual use of such quantities of alcohol as are inconsistent with the safety of a man's family or the retention of his health or of his property. The very fact that we love freedom beyond other nations should make us the more anxious not to desecrate the word by applying it to the most enslaving of vices.

A PREHISTORIC TRUSS.

DR. F. PONCET, late Principal Medical Officer of the French army in Tunis, is the fortunate possessor of a very remarkable statuette or votive image, which was recently found at Soussa, and has made it the subject of an illustrated descriptive article in our contemporary *Le Progrès Médical* of June 1st, 1895, from which we condense the following particulars. The figure, which is composed of terra cotta, measures about four inches in height by two and a half in width, and has been pronounced by M. Maspero and other Egyptologists to be an example of the Egyptian deity Bès or Bizou, whose effigies are so common on the banks of the Nile. It was found by a gentleman named Gouvet while exploring the confines of an ancient Phœnician cemetery, and is supposed to date back to about the year 900 B.C. Not only is this treasure-trove admirable as a work of art and wonderful as a relic of antiquity, it is likewise extremely interesting and valuable from a surgical point of view on account of the accurate representation it affords of two varieties of hernia—the femoral and the scrotal—as well as of a most ingenious and effective truss for use in the inguinal form of the disorder. In spite of the fact that rupture is a very common affection, being present, according to Malgaigne, in about 3½ per cent. of the entire population, there is little if anything known regarding the employment of trusses or other kindred appliances in ancient times, when, owing to the universal predilection in favour of active exercise, the incidence of the complaint must have been at least as frequent as it is at the present day. Celsus, it is true, does mention a kind of bandage for the retention of infantile hernia, and Constantine the African, who flourished at Carthage about A.D. 1100, is said to have made use of metallic instruments for adults; but with these exceptions the records of the past are completely silent on the subject. It has, nevertheless, now become evident from Dr. Poncet's manikin that the physicians of prehistoric times were quite conversant with rupture in most of its forms, and were able to palliate it by means of suitable mechanical contrivances.

As a general rule Bizou is represented as a squat figure, enormously muscular, with a gigantic head and a protruding tongue; his clothing consisting of a panther-skin cloak, fastened in front by the paws, and a cincture composed of two serpents. In the Soussa image, however, the snaky girdle gives place to a most skilfully-fashioned truss consisting of a couple of belts connected to each other by a pliable fascia, and encircling the figure above and below the great trochanters which serve to keep the entire apparatus in position. The belts are clasped at the back and do not run horizontally, but are both more or less curved, especially the lower, which forms an arch in front until it meets the other just above the pubes. Attached to the upper belt, which is evidently intended to be made of some rigid material, are two V-shaped plugs covering the inguinal canals on either side, with their broadened limbs, and then bending upwards to be joined to each other by means of a knotted tape. The great advantages connected with this apparatus are the ability to dispense with a perineal band, and the power possessed by the wearer of tightening or slackening the belts according to the condition of his abdomen. The chief disadvantages are its cumbersomeness and the difficulty that would be experienced by stout

SKETCH OF THE STATUETTE.[1]

1. Upper belt. 2. Material, intermediary fascia. 3. Lower belt. 4. Oblique metallic knob, terminating in a stem forming an arch. 5. Bow-knot. 6. Scrotum. 7. Urethral orifice. 8 and 9. Crural hernia.

persons in adjusting it. Altogether the little figure is a perfect museum of hernial pathology; for, besides the inguinal bandage, it exhibits two multilobar crural ruptures escaping through the orifices of the cribriform fascia, and an enormous scrotal tumour wherein the penis is completely engulfed, with nothing visible but the meatus urinarius, just as, according to Sir Astley Cooper, was the case with the historian Gibbon.

VACCINATION PROSECUTIONS AND THE REPORT OF THE ROYAL COMMISSION ON VACCINATION.

SOME few years ago, when the Report of the Royal Commission on Vaccination was expected to be issued in a few months, the Wigan board of guardians agreed not to institute proceedings against defaulters till the report was received. Since then vaccination in the borough of Wigan has been practically in abeyance, much to the gratification of anti-vaccinationists. Now

[1] We are indebted to the Editor of *Le Progrès Médical* for permission to reproduce this sketch.

the town is suffering from a smart epidemic of small-pox, and although there have been only one or two deaths there have been upwards of sixty cases since the first attack on May 22nd last. The sanitary officers are doing their best to cope with the outbreak, yet no notices are placarded or additional facilities made for revaccination, and the only preventive (vaccination) is not enforced. The guardians, however, seem to have awakened from their lethargy and by a resolution of the board on Aug. 23rd gave instructions to Mr. Halliwell, the vaccination officer, to take proceedings against defaulters of children registered between Jan. 1st and March 31st last. Some 150 summons were issued a fortnight since, and this threw consternation in the ranks of the anti-vaccinationists, who at once held meetings and decided to defend the cases, which were adjourned. In the meantime they held a public meeting, when the usual stock arguments were forthcoming, and the usual intemperate language against the authorities was employed, although the cases were still *sub judice*. The cases were tried last week, and at the commencement of the proceedings Mr. Duxbury said that a fortnight ago, when the cases were adjourned, a suggestion was made that the consideration of the whole question should be left in abeyance until they had received the report of the Royal Commission, which had been sitting for six or seven years. He said they had every reasonable anticipation of receiving this report in the next few months. The chairman (Mr. Marshall) said they had been waiting six years for the report. The cases were then heard; some were dismissed, but the majority were fined 1*s.* and costs. The ratepayers are complaining bitterly of their heavy rates and of the cost of maintaining their excellent sanatorium for infectious diseases. Even this little epidemic will cost something and add to its maintenance account, whereas if vaccination had been proceeded with as heretofore the epidemic would probably have been limited, because the origin of the epidemic was due to a person who lived a nomadic life.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Warwickshire County Sanitary District.—For the last six years Dr. Bostock Hill has presented to the Warwickshire County Council a summary of the annual reports of the district medical officers of health, and that for 1894 is now before us. The estimated population of the administrative county is 317,952, and during 1894 there has been a decided increase in the urban districts as against a decrease in the rural. The death-rate in the rural districts was—as in 1893—higher than in the urban districts, a peculiarity explained by the urban nature of the rural districts. The general death-rate of the county was but 14·07 per 1000, the lowest recorded since the presentation of Dr. Hill's reports. The death-rate of the county was from typhoid fever 0·05, from diphtheria 0·08, and from scarlet fever 0·05 per 1000 of the population, all of which rates were below the average for the last six years. The "infantile" mortality rate was also the lowest recorded during the same period, and some of the low rates indicate, Dr. Hill thinks, that slowly, but surely, a better knowledge is being brought to bear as to the requirements of early infant life. Two urban and one rural districts are still recalcitrant in the matter of notification. Dr. Hill regrets that very little information is given in the district reports as to the condition of vaccination, and he is evidently in favour of vaccination being in the hands of sanitary authorities. The weekly return of infectious disease made by the Warrington County Council seem to be much appreciated in the county, and the city of Coventry has applied to be furnished with copies. The County Council should, Dr. Hill remarks, approach the Corporation of Birmingham with a view of exchanging notification returns with them. The fact of Birmingham possessing a population nearly twice as great as that of the rest of the county renders it, he observes, of great importance to ascertain the origin and spread of infection in that city.

Bolton Urban Sanitary District.—The general death-rate of Bolton (population 118,303) for 1894 was 18·7 per 1000, as against 23·9 for 1893, and Dr. Frederick Adams furnishes in his report a table showing the death-rate of the district per 1000 of the population since the year 1851. The gradually diminishing rate shown from decade to decade should certainly be a great encouragement to the sanitary authority of Bolton to proceed with reform. The rates for the four decades comprised between 1851-90 were as follows:—30·7, 27·5, 23·8, and 21·8, while the rate for the four years 1891-4 was 21·7.

South Shields Urban Sanitary Authority.—Dr. W. H. Turnbull in his annual report for 1894 draws the attention of the sanitary authority to the fact that there are over 120 seamen's lodging-houses in South Shields, and he points out that the staff of the health department available for the systematic inspection of these premises, consisting as it does of only two inspectors, is quite inadequate. Dr. Turnbull observes that it is somewhat remarkable that although the population of the borough has nearly doubled itself during the last twenty years and increased enormously in commercial prosperity, the sanitary staff should have remained practically *in statu quo*. Dr. Turnbull considers that in South Shields there should be one inspector to every 10,000 of the population.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN thirty-three of the largest English towns 6273 births and 4269 deaths were registered during the week ending Sept. 28th. The annual rate of mortality in these towns, which had been 19·3 and 19·8 per 1000 in the two preceding weeks, further rose last week to 21·0. In London the rate was 18·2 per 1000, while it averaged 23·0 in the thirty-two provincial towns. The lowest rates in these towns were 14·7 in Huddersfield, 15·0 in Croydon, 16·1 in Leicester and in Portsmouth, and 16·5 in Bristol; the highest rates were 29·4 in Blackburn, 29·5 in Sunderland, 29·7 in Bolton, 29·9 in Manchester, and 30·5 in Gateshead. The 4269 deaths included 923 which referred to the principal zymotic diseases, against 990 and 981 in the two preceding weeks; of these, 604 resulted from diarrhœa, 81 from diphtheria, 69 from whooping-cough, 60 from measles, 57 from "fever" (principally enteric), 50 from scarlet fever, and 2 from small-pox. The lowest death-rates from these diseases were recorded in Croydon, Plymouth, Norwich, Derby, and Halifax; and the highest rates in Bolton, Burnley, Blackburn, Hull, Sunderland, and Gateshead. The greatest mortality from measles occurred in West Ham and Blackburn; from scarlet fever in Huddersfield; from whooping-cough in Gateshead, Wolverhampton, Bradford, and Bolton; from "fever" in Bolton and Sunderland; and from diarrhœa in Cardiff, Nottingham, Burnley, Bolton, Blackburn, and Hull. The 81 deaths from diphtheria included 56 in London, 8 in West Ham, and 3 in Birmingham. Two fatal cases of small-pox were registered in London, but not one in any other of the thirty-three large towns. There were 234 cases of small-pox under treatment in the Metropolitan Asylum Hospitals and in the Highgate Small-pox Hospital on Saturday last, Sept. 28th, against 328, 307, and 271 at the end of the three preceding weeks; 21 new cases were admitted during the week, against 25, 42, and 23 in the three preceding weeks. The number of scarlet fever patients in the Metropolitan Asylum Hospitals and in the London Fever Hospital at the end of the week was 2087, against 2600, 2674, and 2732 on the three preceding Saturdays; 339 new cases were admitted during the week, against 336, 365, and 344 in the three preceding weeks. The deaths referred to diseases of the respiratory organs in London, which had been 123 and 141 in the two preceding weeks, further rose to 173 last week, but were 37 below the corrected average. The causes of 54, or 1·2 per cent., of the deaths in the thirty-three towns were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Portsmouth, Leicester, Nottingham, Oldham, Newcastle-upon-Tyne, and in nine other smaller towns; the largest proportions of uncertified deaths were registered in Cardiff, Wolverhampton, Preston, and Hull.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 16·9 and 19·5 per 1000 in the two preceding weeks, declined again to 17·5 during the week ending

Sept. 28th, and was 3·5 per 1000 below the mean rate during the same period in the thirty-three large English towns. The rates in the eight Scotch towns ranged from 13·2 in Aberdeen and 13·5 in Leith to 19·4 in Glasgow and 20·5 in Dundee. The 506 deaths in these towns included 48 which were referred to diarrhœa, 9 to whooping-cough, 6 to measles, 6 to "fever," 5 to diphtheria, 5 to scarlet fever, and not one to small-pox. In all, 79 deaths resulted from these principal zymotic diseases, against 90 and 93 in the two preceding weeks. These 79 deaths were equal to an annual rate of 2·7 per 1000, which was 1·8 per 1000 below the mean rate last week from the same diseases in the thirty-three large English towns. The fatal cases of diarrhœa, which had declined in the four preceding weeks from 78 to 57, further fell to 48 last week, of which 19 occurred in Glasgow, 10 in Dundee, and 6 in Edinburgh. The 9 deaths from whooping-cough were within one of the number in the preceding week, and included 2 each in Glasgow, Dundee, Leith, and Greenock. The deaths referred to different forms of "fever," which had increased from 4 to 16 in the three preceding weeks, declined to 6 last week, of which 4 occurred in Glasgow. The 5 fatal cases of scarlet fever slightly exceeded the numbers recorded in recent weeks, and included 3 in Glasgow. The deaths from diphtheria, which had been 5 and 3 in the two preceding weeks, rose again to 5 last week, of which 3 occurred in Edinburgh. The deaths referred to diseases of the respiratory organs in London, which had been 52 and 66 in the two preceding weeks, further rose to 82 last week, and exceeded by 14 the number in the corresponding week of last year. The causes of 28, or nearly 6 per cent., of the deaths in these eight towns last week were not certified.

HEALTH OF DUBLIN.

The death-rate in Dublin, which had been 25·4 and 22·1 per 1000 in the two preceding weeks, rose again to 24·8 during the week ending Sept. 28th. During the thirteen weeks of the quarter ending on Saturday last the death-rate in the city averaged 23·4 per 1000, the rate during the same period being 18·6 in London and 16·5 in Edinburgh. The 166 deaths registered in Dublin during the week under notice showed an increase of 18 upon the number in the preceding week, and included 24 which were referred to the principal zymotic diseases, against 21 in each of the two preceding weeks; of these, 13 resulted from diarrhœa, 4 from whooping-cough, 2 from small-pox, 2 from scarlet fever, 2 from "fever," 1 from measles, and not one from diphtheria. These 24 deaths were equal to an annual rate of 3·6 per 1000, the zymotic death-rate during the same period being 3·0 in London and 2·1 in Edinburgh. The fatal cases of diarrhœa, which had been 12 in each of the two preceding weeks, were 13 last week. The 4 deaths referred to whooping-cough exceeded the number in any recent week. The fatal cases of "fever," which had been 4 and 5 in the two preceding weeks, declined to 2 last week. The 2 fatal cases of scarlet fever corresponded with the number in the previous week. The 166 deaths in Dublin last week included 42 of infants under one year of age, and 35 of persons aged upwards of sixty years; the deaths both of infants and of elderly persons considerably exceeded those recorded in the preceding week. Two inquest cases and 4 deaths from violence were registered; and 48, or nearly a fourth, of the deaths occurred in public institutions. The causes of 15, or nearly 9 per cent., of the deaths in the city last week were not certified.

THE SERVICES.

MOVEMENTS OF THE MEDICAL STAFF.

BRIGADE-SURGEON-LIEUTENANT-COLONEL MACNAMARA, lately commanding the Depôt, Medical Staff Corps at Aldershot, has embarked for a tour of service in Egypt, and Surgeon-Lieutenant-Colonel Allin will succeed him. Surgeon-Captain Kennedy has embarked for Egypt.

INDIA AND THE INDIAN MEDICAL SERVICES.

Surgeon-Major J. Maitland, M.D., is appointed to act as Senior Medical Officer, General Hospital, Madras, during the absence of Brigade-Surgeon-Lieutenant-Colonel W. Price, M.D., on leave. Surgeon-Major J. Smyth, M.D., is appointed to act as Surgeon, General Hospital, Madras, during the employment of Surgeon-Major J. Maitland on other duty. Surgeon-Major M. O'Dwyer, Civil Surgeon, is appointed to officiate as deputy Sanitary Commissioner, Punjab, as a temporary arrangement, vice Surgeon-Captain H. J. Dyson, whose services have been placed at the disposal of the Government of India. Surgeon-Captain R. Bird, Resident Surgeon, Medical College Hospital, is appointed to act as Professor of Anatomy, Medical College, Calcutta, in addition to his own duties, until further orders. The undermentioned officers retire from the service:—Surgeon-Lieutenant-Colonel J. A. Laing, Madras Establishment; Surgeon-Lieutenant-Colonel E. B. Ruttledge, Bengal Establishment, Civil Surgeon, North-West Provinces and Oudh.

NAVAL MEDICAL SERVICE.

The following appointments are notified:—Staff-Surgeons: John Hunter to the *Edgar*, and A. W. May to the *Benbow*.

ARMY MEDICAL RESERVE OF OFFICERS.

Surgeon-Captain Richard C. M. Pooley, having resigned his Volunteer appointment, ceases to be an Officer of the Army Medical Reserve of Officers. Surgeon-Lieutenant Henry D. Brook to be Surgeon-Captain. Surgeon-Lieutenant Hamilton Chambers Reid, M.B., Glasgow Companies Volunteer Medical Staff Corps, to be Surgeon-Lieutenant.

VOLUNTEER CORPS.

Royal Engineers: 2nd West Riding of Yorkshire (Leeds): The services of Surgeon-Lieutenant C. Malcolm are dispensed with. 3rd Volunteer Battalion the Manchester Regiment: Surgeon-Lieutenant J. W. Talent, M.B., resigns his commission.

THE MADAGASCAR CAMPAIGN.

The latest intelligence from Madagascar is somewhat better. The general commanding telegraphed to the French War Office from Andriba on the 27th ult. that the Voyron detachment had crossed the Ankaraka Mountains and had been joined by General Metzinger's detachment and were marching against Babay. The Hovas have so far offered little or no resistance, and the health and spirits of the troops composing the advancing French force are reported to be excellent. It is expected, however, that the Hovas will offer some opposition to the French at Babay, which is only about thirty kilometres from Antananarivo. The flying column amounts to an effective total of 5000 men with twenty-two days' supplies. So far for the force in the uplands; but there is no further intelligence regarding the troops on the seaboard in the lowlands. There will probably be a good deal of sickness and inefficiency among the troops in the field during the rainy season, and it is important that Antananarivo should soon be reached. General Zurlinden reports that since the arrival in France of the first batch of sick troops from Madagascar there have only been nine deaths, and that since the arrival of the *Concordia* there have been none. There are 400 invalids from Madagascar in hospital at Marseilles, but only three of them are in a critical condition. General Zurlinden, the French Minister of War, paid a long visit to the military hospital at Marseilles on the 30th ult. and made many inquiries of the patients as to their state of health and their impressions about Madagascar and the campaign. Pitiable accounts are given by the French soldiers and marines who have just arrived at Marseilles in the mail steamer *Australien* of the sanitary condition of the troops in Madagascar. It is the old story of want of preparation and foresight, defective transport and supplies, overworked and overweighted troops, and inadequate hospital accommodation with insufficient medical and nursing staff.

DEATHS IN THE SERVICES.

Surgeon-General Sir Thomas Longmore, C.B. (retired), at Swanage, on Tuesday last, in his seventy-ninth year. He was educated at Guy's Hospital, became Surgeon in the Army in 1854, Deputy-Inspector-General in 1858, and Inspector-General in 1872. He served throughout the Crimean campaign in 1854–55, and in Bengal during the Sepoy Mutiny. He was Professor of Military Surgery at the Army Medical School, Netley, from 1860 to 1891. He held the appointment of honorary surgeon to the Queen and was a Knight of the Legion of Honour.

Surgeon-General Hampden Hugh Massy, C.B. (retired), at his residence, Bournemouth, on the 27th ult., aged seventy-five. The late officer had seen a great deal of service in the Crimea, was head of the sanitary branch of the medical department under Sir Galbraith Logan, became Deputy-Surgeon-General at Bangalore, Madras, and subsequently Principal Medical Officer at Netley.

M. HAFFKINE.

We are very sorry to learn that M. Haffkine is compelled to leave India owing to impaired health, attributable to the effects of an attack of climatic fever contracted in Assam. By his exhibition of self-sacrifice and enthusiasm in prosecuting the work he had undertaken in India M. Haffkine is well entitled to the esteem in which he is evidently held in that country. He has been indefatigable in his labours, has spent a large sum of money, and has sacrificed his time, and now his health, in the cause he had at heart. We sincerely join with his many friends in wishing him a speedy restoration to health.

MEDICAL REFORM IN INDIA.

We learn from the Anglo-Indian papers that a movement has been started among the native medical element in Bombay for the separation of the civil and military medical services, with reconstitution of the civil branch and the advancement and recognition of its subordinate grades. A committee has been formed for the purpose, and a preliminary meeting held for settling the outlines of a programme of medical reform in India, and for the organisation of local committees at different centres in India and the formation of a fund are contemplated.

TYPHOID FEVER AT POONA.

There has been a considerable amount of enteric fever at Poona of late, and some fatal cases have occurred among the officers at that station.

The Surgeon-Major-Generalship at Gibraltar has been transferred to Devonport, and the medical charge at Gibraltar will be held by a Surgeon-Colonel.

Correspondence.

"Audi alteram partem."

"MERCURY IN HEART DISEASE."

To the Editors of THE LANCET.

SIRS,—I have been much interested in reading Dr. W. Murray's article under the above heading in THE LANCET of Sept. 28th. I concur fully in his opinion of its great value in all cases of heart disease where passive congestion and œdema are present. I well remember a remark of Dr. Stone, at St. Thomas's Hospital, concerning the value of the well-known pill containing equal parts of squill, digitalis, and blue pill. "Both Dr. Murchison and I," said he, "highly appreciate this prescription. But he will only allow any potency to the digitalis there is in it and forgets all about the blue pill, whereas I, perhaps, am liable to think too little of the digitalis and place all my trust in the mercury." My own experience leads me also to think far more highly of mercury (or calomel) in the treatment of passive cardiac congestion than of digitalis. Dr. Murray believes it has a peculiar tonic action on the heart itself. Though not denying such action, I do not see that it is necessary to explain the efficacy of the drug in these cases. Water-logged tissues can only exhibit a feeble vitality. The water-logged lungs, liver, kidneys, pancreas, intestinal and lymphatic glands can, therefore, but feebly perform their nutritive functions. Food will thus be imperfectly assimilated and effete material imperfectly removed. The circulation of the resulting poisonous matters in the body will still further paralyse all its functions, including that of the already weak heart, and, what is of still greater importance in this respect, nature's endeavour to prevent the circulation of these poisons, by constricting the peripheral arterioles, will double and treble the heart's labour. Common-sense reasoning would urge us not to drive the heart, but rather to relieve it of all unnecessary labour. This is what mercury does by its unique power of stimulating all glandular organs. It urges them to healthy metabolism, notwithstanding their œdematous condition. Hence the ptomaines vanish and with them the constriction of the arterioles, freeing the heart of half its labour. It is thus I would explain the excellent action of mercury in the case so well detailed by Dr. Murray, and also in one I have recorded on page 389 of "Essays in Heart and Lung Disease," which is briefly this: "A man with double aortic disease had orthopnœa and ascites, as well as general œdema. He was given cardiac tonics for three days with no relief, the urine remaining at twenty ounces. I then gave him a third of a grain of calomel every two hours; the urine at once rose to over 100 ounces, and in ten days the œdema and orthopnœa were quite gone, the heart was calm, and the pulse, which had been small and hard, was large and duly soft."

I am, Sirs, yours truly,

Birmingham, Sept. 28th, 1895. ARTHUR FOXWELL.

"OVER-OPERATING IN GYNÆCOLOGY."

To the Editors of THE LANCET.

SIRS,—Mr. Lawson Tait, in his letter in THE LANCET of Sept. 21st, speaks of the "bagatelle risk of 1·6 per cent. mortality." Does he remember the mortality of about 15 per cent. in an institution in this town for the establishment of which he is responsible? Mr. Tait writes as though abdominal sections were resorted to chiefly for the removal of pus. It has been observed here by myself and others that ovaries and tubes said to be diseased have after removal proved to be not only free from pus, but from any sign of disease sufficient to justify the operation.

I am, Sirs, yours faithfully,

Southampton, Sept. 28th, 1895. J. F. BULLAR.

"A RARE FORM OF SKIN DISEASE FOLLOWING THE EXTERNAL APPLICATION OF IODINE LINIMENT."

To the Editors of THE LANCET.

SIRS,—Perhaps you will permit me to draw attention to a few points in connexion with Dr. Dobie's interesting case published in THE LANCET of Sept. 28th. In 1890 I pointed out that many drugs and specific poisons had the power, when introduced into the system, of irritating any or all of the channels of excretion. In this way we get dermatitis, bronchitis, dyspepsia, diarrhœa, nephritis, and so on in connexion with gout, ptomaines, exanthems (such as scarlet fever), and various drugs. Iodine is one of the drugs that seems to be capable of inflaming any of the excretory outlets. Its excretion, when not carried out by the kidneys, gives rise to the interesting group of symptoms known as "iodism." It has, moreover, actually been detected in the pustules of some forms of iodine rash. For some years I have been on the look-out for iodism where there was distinct evidence of kidney inadequacy. In Dr. Dobie's case there were albuminuria and signs of advanced kidney disease. My suggestion is that the iodine was absorbed into the circulation by the skin, that it was not excreted by the usual channel, the kidney, and that the severe general subsequent dermatitis was due to an attempt of the skin to throw off the irritant iodine; that the rash was, in fact, caused by excretory irritation.

I am, Sirs, yours faithfully,

Pump-court, Temple, E.C., Sept. 28th, 1895. DAVID WALSH.

"THE FIFTH YEAR OF MEDICAL STUDY AND PUPILAGE."

To the Editors of THE LANCET.

SIRS,—With regard to devoting six months of the last year of pupilage in the practice of a general practitioner, alluded to in your most interesting leading article in THE LANCET of Sept. 28th, is there anything to prevent the pupil, after he has qualified, returning to the scene of his last days of pupilage, taking advantage of the six months' introduction he has had to the patients of the general practitioner, and commencing a practice on his own account?

I am, Sirs, yours truly,

Park-street, Windsor, Sept. 27th, 1895. W. B. HOLDERNESS.

"HOSPITAL ABUSE AT BRIGHTON."

To the Editors of THE LANCET.

SIRS,—The committee of management of the Sussex County Hospital have noticed with much concern a paragraph in THE LANCET of Sept. 21st, founded on a letter in a local newspaper, on alleged abuse of the charity by patients able to pay for medical attendance. Such a statement in the leading medical journal, if allowed to go

unquestioned, would be more than likely to act prejudicially to the interests of the hospital, and though the committee would have welcomed the opportunity of reply previous to this publication they now hasten to lay before the Editors the following facts, which they trust may receive their attention, and should such commend itself to them induce some favourable notice in the next issue of THE LANCET. Before proceeding further the committee would point out a misleading statement in the letter above alluded to. The writer states: "The patients are drawn from a population of 150,000," though he goes on to mention: "Some of the patients are from other parts of Sussex;" as a matter of fact the Sussex County Hospital is for "the sick and lame poor of all nations," and from the figures of the first six months of the current year it is shown that 35·8 per cent. of the in-, and 21 per cent. of the out-patients were derived from places quite outside the towns of Brighton and Hove. The possibility of such abuse has from time to time received anxious considerations by the managing governors, and last year a subcommittee endeavoured in the most painstaking way to elicit the actual state of affairs in respect to this matter. The correspondent, quoted in THE LANCET, gives as an instance of abuse a suppositious case of hospital treatment of a child of a workman in receipt of 35*s.* or £2 a week, and yet there may be circumstances—to wit, a large family, other home sicknesses, operations, special treatment or nursing required, &c.—which may make the case, not only deserving of such treatment, but one that no hospital could refuse. The subcommittee, wishing to start on some definite principle, primarily laid down a scale as to what should under ordinary circumstances constitute a claim for admittance—say, a weekly income of £1 or less for single men, £1 2*s.* 6*d.* for married men, and an extra 2*s.* 6*d.* each for every child not earning a livelihood. As the circumstances, &c., of in-patients can during their residence in hospital be looked into, and their numbers are comparatively smaller, the inquiry was confined to the out-patient department. Several weeks letters of recommendation were carefully scrutinised, those not fully filled in were sent back for further particulars, and in certain cases were referred to the honorary medical officers in charge of the cases for their opinions as to the nature of the complaints and their claim for hospital treatment. In addition to this, the subcommittee took 100 letters pertaining to out-patients from Brighton and Hove, and personal inquiries were made into these through the Charity Organisation Society, clergymen of their parishes, their own houses, and other channels as to the verity of particulars given, and the justice of giving gratuitous treatment. To enter into the very many other particulars of this inquiry would extend this letter to inordinate dimensions, and the committee of management, therefore, merely quote the final result as given in their last annual report: "A searching scrutiny was made this year by a subcommittee, which showed that 96 per cent. of the cases were entirely fit and proper subjects for gratuitous treatment, and though in the remaining 4 per cent. sufficient evidence could not be obtained, it was thought that even in these cases, were closer scrutiny possible, it might be shown that several could be received without any abuse of the charity." It may here be mentioned that in the early part of 1894 an urgent appeal accompanied the annual report, urging all subscribers to exercise a closer supervision over all letters of recommendation granted by them Were this alleged abuse merely applicable to the charities quoted by the aforementioned writer of the letter, such would be of much greater weight, but it equally applies to all hospitals in the kingdom, and was prominently brought out as regards London in the inquiries made by the Lords' Committee. As regards the Sussex County Hospital, the facts herein narrated show how alive the managing governors are to check any such abuses, but the difficulty is very great, and the inquiries, both in reference to the patients themselves and the subscribers who recommend them, require delicacy and tact. Instead of dissolving the subcommittee at the end of the inquiry, it was considered that it would be politic and useful to keep it on in permanence for any further matters that might occur in reference to the same subject, and the committee can only say that if anyone will acquaint them with any case of abuse or suggest any practical remedies, such will receive their earnest attention and grateful thanks.

I am, Sirs, yours faithfully,

Brighton, Sept. 28th, 1895. W. H. ORTON, M.A., Secretary.

*** We are happy to give insertion to the above letter and are satisfied that the committee of the Sussex County Hospital are anxious to restrict the use of that institution to fit cases. We agree that even with 40*s.* wage there may be elements of sickness or misfortune in a family entitling it to consideration, but these cases are rare; and we are still of opinion that the committee will best command the respect of their supporters by keeping a very strict eye on persons abounding in every community who take as a charity that for which they should pay.—ED. L.

"RETURN" CASES OF SCARLET FEVER.

To the Editors of THE LANCET.

SIRS,—In THE LANCET of June 22nd last you published an article by Dr. A. K. Chalmers in reference to the reappearance of scarlet fever in a household shortly after the return of one of the inmates from hospital. *Apropos* of this subject the following case will be interesting. A child returned home on Aug. 31st last, after a residence of nine weeks and three days in a scarlet fever hospital. The nightgown and one or two small articles were returned to the mother, with a form stating that the said things had been properly disinfected and were free from risk of causing infection. This was on Saturday. On the Monday a sister of the patient wore the nightgown that had been returned from the hospital two days before. On the Wednesday night, forty-eight hours later, she was seized with sickness. On Thursday morning I was called to see her. On Friday morning the rash had appeared. I certified it as scarlet fever, and the child was removed to the hospital, where she died. I am not aware of any scarlet fever cases at all close by; the child that had come back was quite free from desquamation; it was holiday time, so school had nothing to do with it. There remains only the possibility of infection through the nightgown brought from the hospital. *Post hoc* is not always *propter hoc*, but in this case there is no doubt whatever in my mind that that is how the disease was produced. There can be no question that disinfection is thoroughly and efficiently carried out. Whence, then, the failure? I venture to suggest that the air in and immediately around a fever hospital is so full of germs that drying linen becomes reinfected. If so, either all articles must be destroyed, or disinfected elsewhere than at the hospital, and must be returned direct to the patients' homes without being taken again to the hospital. This is the second occasion within a few months in which the return of one of my patients from hospital has been signalised by a second outbreak in the same house. In both cases the homes and infected articles were disinfected on the removal of the first patient, and remained free from suspicion until the return of that patient. The importance of this subject justifies wide discussion.

I am, Sirs, yours faithfully,

Herne Hill, S.E., Sept. 28th, 1895. E. PAGET THURSTAN, M.D.

"THE EFFECT OF THYROID EXTRACT IN MYXŒDEMA COMPLICATED BY ANGINA PECTORIS."

To the Editors of THE LANCET.

SIRS,—May I point out regarding Dr. H. C. L. Morris's interesting note in THE LANCET of Sept. 28th on the above subject that the pathology of his patient's case is probably neither difficult nor puzzling, and that there is no need to invoke the aid of the nervous system? For many years I have been pointing out[1] that the high blood pressure which is the cause of the angina is nearly always the result of excess of uric acid in the blood. I have also pointed out[2] that extract of thyroid gland is practically equivalent to uric acid as regards both its physiological and pathological effects. Given these two points, the pathology of this case is simple enough—the uric acid or similar xanthin compounds contained in the thyroid extract entered the blood, raised the pressure, and made the angina worse. But, as Dr. Morris points out, Professor Schäfer has recently shown that thyroid extract lowers blood pressure, and it is quite true that it shares this effect with uric acid and the whole of the xanthin group. But it is also true that this primary fall of blood pressure is followed later by an equally constant and fully equivalent rise, and it is during this secondary rise of blood

[1] Uric Acid, second edition, pp. 111 and 190.
[2] Ibid., p. 76.

pressure that the angina occurs. This is probably so even in Dr. Morris's own case, as he tells us, with reference to the second attack, that he gave "two grains and a half every second day," and that "he experienced no discomfort until the twelfth day." Now, if the thyroid was given, as seems probable from the context, on the first, third, fifth, and uneven days, then there was none given on the even days, and the attack occurred on the even day, the twelfth—i.e., the dose given on the eleventh caused a fall of blood pressure on that day followed by a rise next day, and this rise was increased by a certain amount of uric acid or xanthin which had accumulated during the previous administrations from the first to the eleventh day, some fifteen grains in all. My writings on angina have been quoted by others as explaining their cases, notably by Professor T. J. Mays,[3] who also points out the very interesting fact that the attack of angina may, just like the attack of headache or epilepsy, be preceded by feelings of exaltation and well-being. In other words, there is a fluctuation in the excretion of uric acid: with its diminished presence in the blood and minus excretion in the urine go relaxed arterioles, low blood pressure, and mental brightness or well-being; with its natural and corresponding fluctuation in the opposite direction there is excess of uric acid in the blood and urine, and with that go contracted arterioles, high blood pressure, and the headache, the fit, or the angina. The parallel between these diseases is therefore absolute and depends on community of causation; neither of them is directly due to the nervous system, but only to the effects of the altered circulation upon it. I have heard of at least one case of epilepsy in which the administration of thyroid extract for some other trouble seemed to increase the fits or bring them on when otherwise absent, and I can answer for it that it has the same effect in headache. I also hope to publish shortly a case of epilepsy in which it rather appears that by controlling the daily introduction of uric acid I was able to control to some extent the frequency of the fits.

I am, Sirs, yours faithfully,

Brook-street, W., Sept. 30th, 1895. ALEXANDER HAIG.

"HOW SCARLET FEVER IS SPREAD."

To the Editors of THE LANCET.

SIRS,—I am obliged for your annotation in THE LANCET of Sept. 28th under the above heading relating to a case of mine in the Lexden and Winstree district, which you have described very fairly, but not so strongly as the case really stood. The family in question had been ill for weeks at Coggeshall, and after some of them had recovered—and, I may say, all were convalescent—they were removed to a lodging-house at West Mersea, which was not away from other houses of the like character, as the medical attendant told me in his letter he understood to be the case, but right in the middle of the village and between two such houses. This removal occurred on Aug. 14th, and on the morning of the 20th I had a letter from the medical attendant enclosing five notifications, each of which related to a member of this family. Each certificate stated that the individual "is suffering from scarlet fever." Our case was exposure on the public road and the beach between these dates. One would have thought the offence was very clearly put before the magistrates, yet the majority decided to dismiss the case. It is hard enough to have to take the trouble to get such cases up, which one simply does for the public safety, and I can assure you the work entailed is far from being inconsiderable; but it is most annoying to get beaten in such a straight-running case and then to be jeered at by the father of the family when you meet him in the street. I send you a copy of the *Clacton News*, giving a report of a case prosecuted at Thorpe bench last Monday for the conveyance of a girl suffering from diphtheria by rail and carrier's van from Clacton-on-Sea to Sibton Street in Suffolk. This case had a very different ending, a fine of £3 having been inflicted, although on account of the woman's poverty the costs were remitted by the magistrates. It is high time that such ignorant and obstinate individuals were shown that they must obey the law, and not break it as it suits them at the time. I serve three most painstaking authorities, and I feel sure either of them would be ready to enter a prosecution in any case where the public safety was endangered.

I remain, Sirs, yours faithfully,

Colchester, Sept. 30th, 1895. JOHN W. COOK, M.D. ABERD.

[3] International Clinics, second series, vol. vi.

"PRESYSTOLIC APEX MURMUR WITHOUT MITRAL STENOSIS."

To the Editors of THE LANCET.

SIRS,—Dr. Phear's interesting paper having raised in the columns of THE LANCET the question of the nature of presystolic murmurs, I am induced to lay before you a view of the question which has not yet, I believe, received attention. From the observations of Dr. Phear and others, it is quite clear that constriction of the mitral orifice is not an essential element in the production of such murmurs; nor is this surprising, for it is well made out that a very slight irregularity in the blood passages will give rise to these phenomena. I believe we can go a step further. It is an established fact that some kinds of irregularities in the flow of the blood (dependent, no doubt, upon irregular action of the propelling mechanism), without any definite or at least permanent change in the blood passages, are capable of causing murmurs—the so-called hæmic murmurs. These are usually coincident with the ventricular systole, but there is no reason why such murmurs should not be produced wherever there is a flow of blood. Now there is such a flow into the ventricle during ventricular diastole, and a pretty sharp one too. The *bruit de diable*, resembling the presystolic murmur in its rumbling character, is produced by the mere venous flow of blood. Two cases that have come under my notice lately have led me to believe that hæmic presystolic murmurs do occur. In both of these a pure presystolic murmur was noticed on admission to the out-patients' department of the Victoria-park Chest Hospital, but could not be demonstrated a few weeks afterwards. The patients were not anæmic and no thrill was felt. I am inclined to think that, if those presystolic murmurs which are not accompanied by much distress were followed up, some, though perhaps not a very large percentage, of them would be found to disappear, and should be rightly placed in the category of hæmic murmurs.

I am, Sirs, yours faithfully,

London, Oct. 1st, 1895. T. GLOVER LYON.

PREMATURE INTERMENT.

To the Editors of THE LANCET.

SIRS,—It is worthy of remark, in connexion with a question which is at present exciting some discussion, that a greater prominence has not been given to the loss of electro-muscular excitability as a sign of death. Forty years ago the subject was investigated by Crimotel, twenty years later by Rosenthal, and more recently by Onimus. It seems safe to say that in no disease, certainly in none of those conditions usually enumerated as likely to be mistaken for death, is galvanic and faradaic excitability abolished in every muscle of the body. On the other hand, electro-muscular contractility disappears in all the muscles within a few hours after death (generally ninety minutes to three hours according to Rosenthal), its persistence varying to some extent with the particular muscle examined,[1] and with the mode of death[2]. Therefore, if electro-muscular contractility be present in any muscle it means life or death only a few hours before. It is clear that no interment or post-mortem examination ought to take place so long as there is any flicker of electric excitability. To me it seems almost equally obvious that in all doubtful cases, sometimes in sudden death and often to allay the anxiety of friends, this test ought to be applied, and applied by one who is accustomed to handle electric currents for purposes of diagnosis.

I am, Sirs, yours faithfully,

Brighton, Oct. 1st, 1895. W. S. HEDLEY.

"DEATH FROM VEGETABLE POISONING."

To the Editors of THE LANCET.

SIRS,—Your Manchester correspondent declares that "any apparent scepticism was not as to the symptoms, for

[1] Onimus, experimenting on a guillotined criminal, found that two and a half hours after death electro-muscular contractility disappeared in the tongue, diaphragm, and muscles of the face. In the limbs the extensors died before the flexors. The muscles of the back were contractile up to five or six hours after death and the abdominal muscles longer still. Beard and Rockwell, eighth edition, p. 152.

[2] Disappears more rapidly after death from chronic than from acute disease; more rapidly in wasted than in well-nourished muscles. Rosenthal.

they were not described in the report." Here he is right, but the scepticism, which was real as well as apparent, referred to the want of a description of the symptoms; and to the great majority of persons of ordinary education this, together with the whole tenor of the article, conveys the innuendo that there were no symptoms to describe or that they would not bear out the conclusion come to. Your correspondent admits "apparent scepticism" firstly as to the occurrence of henbane in the park. I beg to meet this and to answer the last sentence in the article of last week by saying that henbane does grow in the park. The second cause of "apparent scepticism" being founded on an error—viz., that the deceased said she ate green sauce (she did not say this)—therefore falls to the ground.

I am, Sirs, your obedient servant,

Gorton, Manchester, Sept. 30th, 1895. B. W. MACARTHUR.

THE INTERNATIONAL CONGRESS OF HYGIENE AND DEMOGRAPHY, BUDAPEST, 1894.

To the Editors of THE LANCET.

SIRS,—I take the liberty of asking you kindly to grant space in your valuable paper for the following statements. We are now sending out to the members of the Congress the first volume of the Transactions of the Congress. Members who have not previously sent in their addresses, or who may have since changed their domicile, are respectfully requested to send in correct addresses so as to avoid delay in sending out the other volumes. Non-members of the Congress may obtain the Transactions by sending in a subscription of ten florins, Austrian money, together with two florins for postage; the amount to be sent in to the Director of the St. Rochus Hospital at Budapest. All other communications should be addressed to the editor as given below.

I am, Sirs, yours obediently,

SIGISMUND DE GERLOIRY, M.D.,
Editor of the Transactions of the Congress.

St. Rochus Hospital, Budapest, September, 1895.

"GUARDIANS AND MEDICAL OFFICERS."

To the Editors of THE LANCET.

SIRS,—As medical officer to, I believe, the largest and most populous district in the metropolis—the number of patients in my register reaching to about 2200 annually and having the attention of three relieving officers—I can speak with some experience regarding these officers and their ways. In the first place I must traverse your dictum that a relieving officer has *no absolute* discretion in dealing with an urgent case; probably he has no *practical* discretion in the actual working of the Act, as, according to the Consolidated Local Government Board Act, a medical officer might recommend this, that, or the other, but the relieving officer has absolute discretion to do just as he pleases. Of course, he takes all responsibility, should he refuse to accede to the recommendation of a medical officer and death resulted. I consider this a great flaw in the Act, conferring great power and discretion on the relieving officer, who is least able to bear it. Our board sent out instructions some two years since that a medical officer in recommending relief should state not only what food was necessary, but the actual quantity of each foodstuff. This was found to be a complete dead letter. I found that the relieving officer gave out just what he had in stock, and, as regards quantity, he had to supply not only the patient, but the wants of the family, so that my quantities were of no avail. As regards stimulants, our board are very particular, and I can say, having been in office now about nine years, that no stimulant has ever been given as out-relief.

I am, Sirs, yours truly,

September 28th, 1895. DISTRICT MEDICAL OFFICER.

"THE PHYSIOLOGY OF DEATH BY ELECTRIC SHOCK."

To the Editors of THE LANCET.

SIRS,—I am unable to see what advantage or profit can be gained from the letters of Dr. Shettle under the above heading. Vague speculations as to the influence of the earth's magnetism upon the phenomena of life are unnecessary and tedious. If Dr. Shettle has performed any experiments or collected any new facts respecting the physiology of death from electric shock, by all means let us have them, and let them be as briefly stated as possible. For my part I am entirely sceptical as to the production of electrical currents in the body by the flow of blood across the magnetic lines of force which traverse the body, and it does not even seem to me to be worth while discussing in detail many points raised by Dr. Shettle, where, in my opinion, either his premisses or his reasoning are unsound.

I am, Sirs, yours obediently,

Sept. 29th, 1895. A PRACTICAL MAN.

ERRATUM.—In Dr. Alexander Morison's letter on non-stenotic mitral bruit in THE LANCET of Sept. 28th "valvular contraction" is printed instead of *ventricular* contraction.

THE BATTLE OF THE CLUBS.

(FROM OUR SPECIAL COMMISSIONER.)

(*Continued from p. 815.*)

MEDICAL AID COMPANIES AT EASTBOURNE.

THE situation at Eastbourne differs fundamentally from what I have seen and described at Portsmouth. In the latter town a union of medical men has been formed to resist the encroachments of the friendly societies who seek to form lodges of children and females. At Eastbourne the question of the friendly societies has not yet been taken in hand, and for the moment the struggle is directed against the National Medical Aid Company, Limited. The method of action at Eastbourne is also totally different. For many years two assurance companies which deal mainly with the poor have done an extensive business in this town. The one is the Liverpool Victoria Legal Friendly Society and the other the Prudential Assurance Company. To secure life assurances the former of these companies became intimately associated with the National Medical Aid Company, Limited. It employs a considerable number of canvassers, and it would seem that these men find it easier to persuade people to insure against sickness than to insure their lives. The canvassers, therefore, very often open the negotiations by pointing out the advantage of paying 1*d.* per week to the National Medical Aid Company so as to secure the services of the medical men employed by that company. Then when this point has met with approval the canvasser explains that such medical insurance cannot be obtained unless the person in question also insures his life and that the life insurance is granted by the Liverpool Victoria Legal Friendly Society. This method of canvassing for life insurances proved so successful that the Prudential Assurance Company was compelled to adopt similar means. Thus the two great assurance companies which do the most business with the poorer classes of Eastbourne became, practically speaking, medical aid societies. This gave rise to serious grievances and abuses.

Early this year a private meeting was held. Some of the younger members of the profession, who suffered considerably from this state of affairs, approached the Eastbourne Medical Society. This is a purely scientific body constituted for social purposes, and not especially with a view to defending the material interests of the profession. Nevertheless, Dr. Muir Smith was allowed to read, last April, a paper to this medical society setting forth the abuses that had arisen. A resolution was carried to the effect that the medical profession should themselves organise a medical aid society, which would do the work that had previously been done in a manner contrary to the ethics of the profession and for the sole purpose of promoting the interests of commercial assurance companies. For this purpose the resolution carried at the meeting of the Eastbourne Medical Society urged that a charitable institution, an endowed provident dispensary which exists at Eastbourne, should be asked to take the matter in hand. The Provident Dispensary was requested to coöperate and reorganise on the lines approved by the general body of the profession at Eastbourne. These negotiations were not, however, successful. It was stated that the fact that the dispensary in question had endowments made it difficult to alter its rules and methods of working. One of the great objects held in view was that

the number of medical men giving medical aid should not be limited. The National Medical Aid Company at Eastbourne employed three medical officers and was willing to guarantee a minimum income. This is undoubtedly a great temptation for the young practitioner who has no opening and no private means to live upon while he creates a practice. Now, however, it can no longer be said that these assurance and medical aid companies are the only road to a poor practice. The association which the medical men themselves have formed opens its arms to all new-comers if they are fully qualified. This association was organised when the negotiations with the existing dispensary fell through. It is called "The Eastbourne Provident Medical Association" and was finally constituted in August. It began work at the commencement of September this year. The object of the association, as officially stated in its rules, is to establish a self-supporting society to enable such persons within the borough of Eastbourne as cannot pay for medical attendance at the usual rates to secure for themselves and their families the advantages of medical attendance, advice, and medicine during illness. Thus, it will be seen, the object is the same as that professed by the medical aid companies, but the management is entirely in the hands of the medical profession, and there can be no further question of utilising medical aid as a means of inducing people to insure their lives for the benefit of some financial speculation.

The Eastbourne Provident Medical Association is managed by a general committee consisting of all the acting medical staff and of a consulting medical staff of two representatives deputed by the Eastbourne Medical Society who are not on the medical staff of the association. This latter clause was inserted so that there should be some outside control, but of a purely professional kind and appointed by members of the profession not financially interested. The honorary secretary and the honorary treasurer are also medical men, but are not members of the staff. The association was fortunate in securing Mr. J. H. Ewart, the present President of the Eastbourne Medical Society, as its chairman of committee and treasurer. The post of honorary secretary is held by Dr. A. Harper. Both these gentlemen have the right to speak and vote at the meetings of the managing committee. Seven members, including the officials, form a quorum. For ordinary routine work there is a subcommittee consisting of the secretary, the treasurer, and three committeemen, three in this case forming a quorum. The first thing to be done was to appoint one or more collectors at a weekly salary and a commission. These collectors have to go round to all the members, collecting the weekly or monthly subscriptions paid to obtain medical aid, keep account of the same, and pay the money received to the treasurer once a week. The treasurer has to check the collectors' books; and every quarter, after deducting what is required to pay the working expenses, he divides the rest among the acting medical staff proportionately to the number of members on their respective lists. Thus each medical officer is paid exactly in proportion to the number of persons under his care, and he receives all the subscriptions these persons have paid except what is deducted to cover the working expenses. This completely puts an end to the exploiting and sweating of medical men. The pay may not be high; but, such as it is, no one makes any profit out of it save the medical man himself. Also the public—that is, the subscribing members—will not be urged by canvassers or collectors to seek the services of one medical man instead of another. One of the rules stipulates that "no orders or communications shall be given to the collectors except through the honorary secretary." Then, while no particular men are to be especially recommended by the collectors, the association, as already mentioned, is open to all comers. This is the rule, and, as important principles are involved, it is worth quoting the text of the rule word for word:—"Any duly qualified and registered practitioner resident in Eastbourne (not practising as a homœopath) may become a member of the staff, subject only to his appointment being approved by the committee. All members of the staff must also sign an undertaking (*a*) not to conduct clubs of their own at all (other than friendly societies registered under the Act), unless it be at rates *higher* than those of the Eastbourne Provident Medical Association; (*b*) to have no professional intercourse whatsoever with any medical man who associates himself with any of the companies known as medical aid societies or with similar institutions so long as the methods adopted by these societies include (1) canvassing for members in the interest of individual practitioners; (2) the virtual sweating of their medical officers by [the inadequate remuneration offered for the work done."

The latter part of the above rule has also formed the text of a general declaration which has been presented to all the practitioners at Eastbourne. Thirty-eight medical men have signed this pledge. Only one has failed to do so, and he is not hostile to the object held in view, but objects to anything that may be considered like a trades-union. The medical profession at Eastbourne, it must be acknowledged, have acted with great public spirit, and the feeling of professional solidarity has been strong among them. At the same time it would be a mistake to imagine that a similar high and honourable spirit prevails among the medical men of every town in England. It would not be so easy to secure everywhere the same unity of action. There is at Eastbourne an exceptionally large proportion of active medical men who possess private means, and who can therefore afford to enter upon a struggle with the medical aid companies. Then there are various local social reasons which tend to give a high tone to the members of the profession who practise at Eastbourne. Thus, the above pledge was not only readily signed, but has been honourably observed.

The primary object in this movement has not been to improve the financial situation of the medical men, but to combat that system of canvassing which built up a private practice in a manner opposed to all professional rules. The canvasser, to secure his commission and to promote the interests of the assurance company he represented, would try to persuade persons to leave their medical man and to accept instead the services of the practitioner who was the servant of the association or company for which he worked. In thus touting it was not to the canvassers a matter of professional etiquette—it was merely a matter of business; their only object was to obtain customers and to gain commissions. They used the medical man as an article of trade, as a sort of decoy duck so as to obtain subscribers to their assurance companies. The methods, the arguments, and the language employed by these canvassers was altogether derogatory to the dignity of the profession. It was intolerable that medical men should be thus utilised as a bait for the running of commercial companies. The question of inadequate remuneration was altogether a secondary consideration. The National Medical Aid Company, Limited, used to collect a penny per week from adults and a halfpenny per week from juveniles; but on a joint protest being made by its medical officers in 1893 the subscription was raised to a penny for juveniles. From this sum 15 per cent. was deducted for working expenses and the rest given to the medical officers. But the company also charged and kept for itself 4*d*. for entrance fee, 2*d*. for first card, and 1*d*. for other cards. It further enforced the renewal of cards when they were soiled. Still, the general impression is that it is not from these small sums or from the 15 per cent. deducted from the subscriptions that the main profits are made. The chief object is to induce people to insure their lives or join a burial fund; and the fact that so many persons thus insured ultimately let their policies lapse adds immensely to the profits of the undertaking.

It must also be noted that to the canvasser for a company the question of wage limit is of no importance whatsoever; on the contrary, far from desiring that only poor people should subscribe for medical benefits, the canvasser prefers those who are comfortably situated, for they are more likely to pay large premiums for life insurance. Thus, the material interests as well as the dignity of the medical profession were compromised. Such are some of the principal reasons which have led to the formation of the Eastbourne Provident Medical Association. Having decided upon this course of action, the three medical officers in the service of the National Medical Aid Company, Limited, gave a three months' notice of their intention to quit. They employed the interval in explaining to their patients the motive of their resignation and that they would secure the same advantages by joining the new association which the profession had themselves formed. There seems to be but little doubt that the great majority of the members will follow their medical men and join the new association the latter have organised. Then all those practitioners who had private, medical, or slate clubs of their own have brought over all their members to the new association. This was the more easy to do as in most instances it did not involve more than a change of name. The members

pay about the same subscription and are attended by the same medical man. There are already nine practitioners on the medical staff of the Eastbourne Provident Medical Association, and this is a great practical advantage. No benefit club, no medical aid company, could possibly offer its members so large a choice of medical men in so small a town as Eastbourne. As a rule, members joining such organisations have no choice at all, but must accept the services of the medical officer of their society who resides in their district. For these and other reasons the propaganda in favour of the new association was so successful that the three medical officers in the service of the National Medical Aid Company were not required to serve the full three months of their notice. They were set free at the end of the second month, for fear, perhaps, that they would persuade all the members subscribing to the company to subscribe in future to the association founded and managed by the medical men themselves. The National Medical Aid Company, driven into a corner by the resignation of its fully qualified medical officers, has had to import medical assistance. No sooner had the gentleman selected arrived at Eastbourne than a courteous appeal was addressed to him not to place himself in opposition to the interests and the unanimous opinion of the medical profession at Eastbourne. He, however, replied that it was for him a question of £ *s. d.*, and that if he refused the post there were many others quite willing to take it. He is alone to do the work of the three medical officers who resigned, but there is not so much to do, for so many of the members of the National Medical Aid Company have now left that organisation to join the Eastbourne Provident Medical Association. Consequently the presence of this gentleman at Eastbourne does not cause much apprehension. Still, the question remains as to what is to be done with the practitioners who in such struggles serve medical aid companies, who take sides against the interests of, and help to thwart the efforts made to maintain the dignity of, the profession

With regard to the Prudential Assurance Company there have been no difficulties at Eastbourne. This company does a very large insurance business with the poorer sections of the Eastbourne population and never desired to complicate this business with the giving of medical aid. The competition, however, of the Liverpool Victoria Legal Friendly Society compelled it to add medical aid to the ordinary inducements offered to its customers. For this purpose the Prudential Assurance Company asked two or three medical men to allow it to use their names. The agents of the Prudential Company were, nevertheless, strictly enjoined not to canvass for medical men and were given no incentive to do so. If a person who was urged to insure his life, on his own accord asked to be also insured against sickness, the agent mentioned the names of the medical men, but not otherwise. The agent received no commission if the medical insurance was effected; it only enabled him to offer the same advantages as the rival life insurance company. The arrangement, also, is a purely local affair and not a general custom with the Prudential Assurance Company. If, though not in any way urged to do so, the subscriber to a life insurance also desired medical aid he had to present himself to one of the medical men suggested by the agent, who examined the person and imposed his own wage limit. The medical man then sent his own collector for the weekly or monthly payments, paid his own expenses of collecting, and kept all that remained for himself. Under these circumstances the Prudential Assurance Company has no objection to the formation of the Eastbourne Provident Medical Association; on the contrary, all its members that desire medical aid have been transferred to this association. The Prudential Assurance Company is working in harmony with the medical profession and advises all its customers to join the organisation formed by them. Though this is of no direct financial advantage to the Prudential Assurance Company it enables the company to attend strictly to its own business instead of dabbling with medical aid; and to those of its customers who want medical aid the company can offer a choice of nine medical men of good reputation, while its rivals can now only command the services of one single practitioner.

The Eastbourne Provident Medical Association has boldly grappled with the vexed question of the wage limit. First, it stipulates in its rules that no person can become a member who is in receipt of parochial relief. All applicants must be examined and declared to be in good health by one of the medical officers, and persons of indifferent health can only be admitted at special rates to be determined by the committee. Then the rules explain that, "although a most desirable matter, it is very difficult in practice to adopt a hard-and-fast wage limit, and therefore it would appear that the best way of preventing abuse of the association by persons who are too comfortably off will be by leaving absolute discretion in the hands of the committee to consider the case of every applicant on its own merits."

The fact is that at Eastbourne, more especially, a hard-and-fast rule would not be fair. Living is very dear at Eastbourne, and rents are particularly high. The average rent of a workman's cottage is 8*s.* a week; no cottage can be found under 6*s.*, and many working men have to pay more than 10*s.* a week for rent. Provisions generally are dearer than in large manufacturing towns, and great distress prevails in the winter, for most of the artisans at Eastbourne depend on the building trades. Even the lodging-house keepers are often in sore difficulties, for they have enormous expenses, and they are not always certain of letting their apartments. Thus, there are several good reasons for admitting a high wage limit, and the matter is left in a measure to the discretion of the committee. Nevertheless, there must be a general rule, and the Eastbourne Provident Medical Association has not hesitated, in spite of the above difficulties, to establish such a rule. It is, therefore, stipulated as a general principle that for families, if the combined incomes of the parents do not exceed 35*s.* a week, the payment shall be 2*d.* per week for each person above fourteen years of age, and 1*d.* a week for each child under that age. If the combined incomes do not exceed 25*s.* the charge shall be 1*d.* a week for parents and children alike. It is expected that the whole of the family will be entered on the lists, exception being made, however, in the case of any members who may already be members of a registered friendly society. In large families not more than six children will be charged for. When children reach their fifteenth year they can continue their membership by paying the subscription charged for adults. Domestic servants are not admitted as members, but a member who subsequently becomes a domestic servant does not forfeit the privileges of membership. For single persons the wage limit is fixed at 20*s.* per week. The committee reserve the power of giving a quarter's notice and then removing from the books the name of any person who is ascertained to be in receipt of such an income as to render him or her unsuitable for membership. Such persons may, however, give explanations to the committee in self-defence. A charge of 2*d.* is made for cards of membership, the payments must be made in advance, a member more than a month in arrears loses his rights, and his name is effaced from the books if two months in arrears. Those who desire readmission must pay all the arrears due or such part as the committee may require. With regard to confinements, the rule is that the member shall employ the medical man on whose list she is inscribed, but if she prefers to employ some other medical man she must forfeit her right to the former's professional services for a period of six weeks. The fee for confinement is fixed at 15*s.*, payable at any date previously to the confinement. The same charge is made for premature confinements. For vaccinations only calf lymph is employed, and this at the bare cost of the lymph. Special rates, which have not yet been fixed, will be charged for fractures, dislocations, and major surgical operations. Members on joining select the medical man they prefer, but they must give a quarter's notice if they wish to change. Finally, it is stipulated that an annual meeting of all the local members of the profession shall be held to hear the report of the Eastbourne Provident Medical Association. The committee may by a two-thirds majority alter the rules if all the members have a clear twenty-eight days' notice of such proposed alteration.

Such, then, are the rules of this benefit society which the medical men have themselves organised. They have sought to solve the problem by taking the whole matter into their own hands, and the experiment will certainly be watched with keen interest by the whole medical profession.

Eastbourne, September.

SKETCHES FROM RHENISH WATERING-PLACES.

(BY OUR BERLIN CORRESPONDENT.)

THE number of watering-places and health resorts on the Rhine and in its vicinity is so great that a medical man who can spare but little time for the purpose will find it nearly

impossible to visit them all. Some selection being therefore essential, I first directed my steps to Homburg. It is hardly necessary to describe this place to English readers, as perhaps no other foreign watering-place is so well-known in England, neither has any other acquired such a specially English character as Homburg. On arriving at the station after half an hour's journey from Frankfort the English visitor is surprised to hear the drivers of the public vehicles receive strangers whom they suppose to be of British origin with the words, "Carriage, Sir," or something equivalent which they might have learned from the cabmen at Charing-cross or Victoria Stations. On passing through the town one might almost think that English is the vernacular, such advertisements as "Furnished rooms to let," "German rusks," "English perfumery store," &c., being everywhere visible. The people thronging the streets are like those to be seen in a fashionable English resort patronised by seekers after health or amusement, so much so that were it not for the soldiers of the garrison and some other types who prove that one is in Germany, one would seem to be in Bath or Bournemouth. I, indeed, often expected to meet at the next corner either a party of the Salvation Army, or minstrels with blackened faces, or some other of the street scenes peculiar to English towns. Homburg owes its popularity in England to two causes: the first is that the frequent and prolonged visits of the Prince of Wales have made it fashionable for the higher classes and their imitators to go there. With real pride the head waiter on the Kursaal terrace told us that he was expecting to have His Royal Highness and seven English dukes at dinner that evening, of course not mentioning the crowd of earls, viscounts, and other aristocrats of less degree. It is really a very pleasant spectacle to see the Kursaal terrace on a lovely summer evening, crowded with distinguished-looking people, all in evening dress, taking a short after-dinner walk or listening to the musical performance of the admirable Kursaal band. The other cause of Homburg's celebrity—a more valid one and of more medical interest—is its fresh and bracing air, which attracts people in search of a comfortable and charming summer resort, and the multiplicity of its springs and other therapeutical arrangements which appeal to patients suffering from chronic catarrh of the stomach, bowels, or biliary organs, as well as to the gouty and the anæmic. In addition to the natural saline and ferruginous waters, all kinds of artificial baths are supplied in a new establishment built close to the springs. The baths are heated by pipes placed underneath in order to avoid undue loss of carbonic acid. An inhalation-room is connected with the bathing establishment, whilst hydropathic and electrical treatment and massage are performed in special departments. No medical man visiting Homburg should omit a trip to the Falkenstein Institute for Phthisical Patients. This hospital is situated near Cronberg, the residence of the Empress Frederick, about five miles from Homburg, and was one of the first where the open-air treatment of the phthisical was used. It is built on the southern side of the Taunus mountains and is protected from the cold northern winds by these mountains, which ascend gently from the valley of the river Main and form a vast amphitheatre around Falkenstein, Cronberg, and the adjacent places. This sheltered situation makes Falkenstein comparatively warm in winter, and the patients can leave their rooms nearly all the year round. As Falkenstein is about 400 metres (1300 feet) above the level of the sea the air is not so relaxing as might have been supposed from the nearly total absence of atmospheric currents. The patients live partly in a kind of central building, which also contains the dining-hall, reading-room, billiard-room, &c., all well ventilated and heated by hot water, and partly in cottages built in the large park belonging to the establishment. The advanced cases rest nearly all day on couches in the park, whilst the more vigorous are allowed to walk in the surrounding forests. There are three resident physicians in the hospital, and consultants from Frankfort attend the patients when required. The physicians of the hospital principally insist upon a liberal diet, with plenty of milk, whilst medicine is hardly ever prescribed. The institution is patronised by many Germans and foreigners, but the medical men told me that English visitors are very rare, and they would be glad if the profession in England would devote some attention to this establishment. Prominent among its advantages is the circumstance that patients there are under constant medical supervision, and therefore cannot behave in the inconsiderate fashion not unknown in Davos and other places where hotel life is the recognised system. The Falkenstein institution was founded by a citizen of Frankfort, and its regulations were based upon the principles laid down by the late Dr. Brehmer of Görbersdorf. The charges for board and residence, although moderate, are much too high for the poorer classes; but the proprietors do not intend to make money by their enterprise, and, according to the rules of the company the profits, when they have reached a certain amount, are to be employed in the construction of a free hospital for indigent patients.

Travellers from Homburg to Wiesbaden must proceed to Frankfort and start from its central station, one of the largest and certainly, from an architectural point of view, the finest in existence. Only a short journey has to be made, passing through Höchst, the seat of the great "Farbwerke," a very extensive manufactory of chemical products, which supplies nearly the whole world with drugs and chemicals such as antipyrin, phenacetin, carbolic acid, aniline colours, &c., including Professor Behring's antitoxin for diphtheria; the forest of high chimneys belonging to this vast establishment is visible from the railway. We then pass through Castel, opposite to the town of Mayence with its hundred towers on the other side of the Rhine, and in forty minutes from Frankfort come to Wiesbaden. On first arriving there the traveller can scarcely believe himself to be in a health resort, all the appearances being those of a considerable town with long and busy streets and a puffing steam-tram. But on coming nearer to the visitors' quarter, with its beautiful and well-shaded park, its fine kurhaus, and the Kochbrunnen, where crowds of patients are assembled to take the waters, the scene is totally changed. Wiesbaden, indeed, unites the advantages of a thriving town of about 80,000 inhabitants with the requirements of a highly fashionable health resort. It is, therefore, not only a place where people go for the benefit of their health, but has also for a long time been a favourite residential locality for retired military officers, civilian officials, and business men, who appreciate its genial climate with its additional attractions of theatres, concerts, and other amusements; while they can live there as comfortably as in Berlin or Frankfort and at much less expense than in those towns. In summer the temperature is rather high, but, nevertheless, we saw a number of patients; the principal seasons are, of course, the spring and autumn, when all the hotels and boarding-houses are overcrowded; but even during winter there are many patients, as the climate permits them to enjoy the fresh air during a great part of the day. Wiesbaden is the paradise of the rheumatic. They can take hot alkaline baths without going out of doors, as nearly all the hotels are connected with bathing establishments; there are also excellent arrangements for massage, hydropathic treatment, and other therapeutic expedients necessary for this class of sufferers.

A short distance from Wiesbaden is Rüdesheim, celebrated not only for its wine, one of the best produced in this fertile country, but also for the national monument, a gigantic statue of Germania, erected on the top of the Niederwald mountain as a memorial of the revival of the German Empire, and visible from the train as it crosses the Rhine for Bingerbrück. From this station Kreuznach is reached by rail in a very short time. Kreuznach is widely known on account of its saline springs containing iodine and bromine, and also on account of its mother liquor, which is obtained by partial evaporation of the water and is exported to every part of the world. The brine works are situated about twenty minutes from the town, and many children, especially such as are tuberculous, may be seen sitting or playing in the large open halls of the brine works where they are sent to get the benefit of the salt-laden air. As in Wiesbaden, the hotels here have their own bathing arrangements. Kreuznach, too, like every watering-place of the better class in Germany, has its Kurhaus; the population is almost cosmopolitan and the whole place has a fashionable aspect. Those who wish to use the same springs as at Kreuznach, but desire a quieter locality may stay at Münster-am-Stein, a little place about half an hour's drive from Kreuznach, where there are very large brine works and wells of an identical kind. The efficacy of the water is, of course, the same, whilst everything is more simple and less expensive than in Kreuznach. But what makes Münster preferable is the circumstance that not only are the environs much more attractive, but the brine works are in the town and not outside it as at Kreuznach. These two sister towns are very

hostile to each other, and it is really comical to see Kreuznach insinuating that Münster has falsified the analysis of its spring, and Münster asserting that the so-called Kreuznach mother-liquor comes mostly from its own brine works. These local quarrels often find expression in the advertisement columns of the German medical and lay press, to the great amusement of their readers. The Rhine steamer brings us from Bingerbrück, on the most beautiful part of the Rhine, to Niederlahnstein, where we again take the railway for Ems. Considerations of space compel me to abstain from a more detailed description of this watering-place, with its alkaline saline springs, used from remote antiquity for catarrhal affections of the air passages, the respiratory and digestive organs. I must confine myself to the statement that in respect of hygienic and therapeutic arrangements Ems is one of the best appointed places, that the inhalation-rooms which are of so great importance in laryngeal cases are first rate, and that the town itself, nicely situated on both sides of the river Lahn, is very attractive and clean looking. Ems, indeed, needs not to be recommended to the profession, as patients from nearly every part of Europe are sent there by their medical advisers. Here we terminated our inspection of the health resorts, and in the character of ordinary tourists went on over Coblenz and the Moselle valley to ancient Trier, once a residence of Roman emperors.

THE FIFTH INTERNATIONAL CONGRESS OF OTOLOGY.

(FROM A SPECIAL CORRESPONDENT.)

(Continued from p. 814.)

TUESDAY, Sept. 24th, at 9 A.M., found the Congress steadily at work, overtaking in the order officially settled for each sitting the several communications and memoirs on the agenda paper. The attendance was good, and Professor Politzer, as president for the forenoon, maintained the business at a high level of efficiency and dispatch.

Anything like a detailed account of each paper as it was read and discussed would be impossible within the limits of a letter. To say nothing of the fact that the successive "conferenzieri," as Italians style the authors of such communications, got through their matter with a rapid elocution not always easy to follow, the few remarks interjected at the close by a specially interested auditor did not always reach the point of serious criticism, such as could give rise to really fruitful discussion. Indeed, the majority of the "Congressisti" seemed to content themselves with "general impressions," awaiting the opportunity of mastering the views and counter-views advanced when the officially edited "Atti" would be in their hands. In these circumstances all that even the "special correspondent" can do is to report the proceedings in swallow fashion—"skimming and dipping."

An exceptionally interesting and instructive thesis was that of Professor Gradenigo of Turin on the General Treatment of Internal Otitis, which formed, indeed, the main feature of the forenoon sitting. In the afternoon Dr. Gellé presided, when Dr. Corradi of Verona read his communication on Traumatic Perforation of the Tympanum, on which, again, an interesting discussion arose, the chief interlocutors being Professor Politzer and Dr. Gellé. He was followed by Dr. Ferreri of Rome, whose carefully elaborated exposition of Senile Alterations in the Middle Ear was listened to with marked attention and criticised by Professors Politzer and Gradenigo and by Dr. Gellé. Matter of somewhat inferior interest ensued until Dr. Delstanche of Brussels brought back the attention of the audience to a high pitch by his eminently lucid and practical paper on the Employment of Liquid Vaseline in the Treatment of Affections of the Middle Ear. The author's great experience and successful practice lent particular weight to his views, which were confirmed by some of his critics, while others asked for further information as to the mode of injecting the vaseline, as to the quality of the liquid (whether sterilised or not), the necessity or otherwise of adding iodoform, and a number of similar points. The sitting lost none of its animation when the next memoir—the concluding one for the day—was introduced by Dr. Macnaughton Jones. His subject was "Turbinal Hypertrophy," or, to give it the full title it bore in French, "Hypertrophie Turbinale et ses Relations à la Surdité, spécialement à l'égard de l'Opération de la Turbinotomie." Dr. Macnaughton Jones gave a masterly review of the subject as dealt with by previous otologists, and summed up his own conclusions as follows: 1. Turbinal hypertrophy must be regarded as a serious complication of deafness and the cognate aural affections; in those cases in which it precedes the aural symptoms we may justly regard it as being their principal cause. 2. In all cases in which this hypertrophic change is discovered active therapeutic measures, of which galvano-cauterisation is the chief, ought to be put in practice to reduce it. 3. Deviation, or distortion, or morbid growth of the septum is rarely, perhaps never, the cause of deafness, and they become so only in cases in which they complicate the turbinal hypertrophy. 4. In all cases in which we find that the occlusion of a nostril is in part due to the deviation of the septum or to a growth that deviation must be rectified. 5. Turbinotomy is indicated and ought to be reserved for those cases in which, whether in consequence of the bulk or of the nature of the growth, it is vain to expect improvement from any other treatment. This may present itself in a comparatively very small proportion of aural cases. Dr. Macnaughton Jones was so thoroughly master of his ground, shown in his preliminary digest of received, and especially of contemporary, opinion that his highly appreciated paper was exempt from criticism, leaving him nothing to acknowledge but the applause of the sitting, which thereafter rose for the day.

As on the 23rd, so also to-day (Tuesday), the evening closed with an entertainment, which in the latter case took the form of a brilliant banquet given by the President and Madame Grazzi to the Congressisti and their ladies. The guests numbered more than eighty, and enjoyed the evening as thoroughly as excellent *cuisine*, exhilarating music, and an all-embracing geniality entitled them to do. The after-dinner oratory was of a highly successful order, begun by Dr. Grazzi in French, and continued in the same language by Dr. Delstanche, till Professor Politzer set a laudable example by addressing the company in Tuscan of the purest quality. Others emulated the Austrian consultant, but the majority of the after-speakers relapsed into their native tongues, of which we had nearly every specimen, from the English of London, Edinburgh, and Pittsburg to the German of Breslau and the Spanish of Madrid. The speakers vied with each other in their acknowledgments of the hospitality of their reception in the Tuscan capital, and particularly of the grace and tact with which Madame Grazzi did the honours of the Palazzo Peruzzi. After dinner the evening closed agreeably in patrolling the magnificent suite of rooms in that historic palace, admiring the frescoes of the artist whose name it bears, and joining in pleasant comparisons of the impressions already formed of the "City of Flowers."

The sittings of Wednesday, Sept. 25th, were chiefly noteworthy for Dr. T. Barr's paper on the Treatment of Intracranial Abscess consequent on Maladies of the Ear; Professor Gradenigo's contribution to the Endo-cranial Surgery of Otitic Complications; Dr. St. Clair Thomson's observations no Antisepsis and Intra-nasal Medication; and, above all, for Professor Politzer's original and epoch-making memoir on the Present State of the Pathological Anatomy of the Labyrinth. Of Dr. Barr's paper I will only say that owing to his regretted absence through illness it was entrusted to the competent charge of Dr. Urban Pritchard, and that it aroused and maintained the interest of a crowded sitting to the close. Professor Politzer's memoir I need not attempt even to summarise, as its publication, with the cordial consent of the author, has been reserved for THE LANCET. Suffice it to say that as its appearance on the agenda paper proved the chief attraction of the Congress—many otologists having come from a great distance on purpose to hear it—so it amply rewarded the close attention it commanded from the audience, whom it kept in keenest interest until its author, amid successive rounds of applause, resumed his seat. From labour to refreshment marked the next stage of the Congress, which was entertained by the Commune at afternoon tea in the magnificent *salons* of the Palazzo Vecchio, where the ever courteous and kindly President, Dr. Grazzi, presented the Congressisti and their

ladies to the Cavaliere Artimini, who, in the absence of the Syndic, "did the honours."

Next day (Sept. 26th) brought the business of the Congress to a close, the feature of the forenoon sitting being Professor Politzer's demonstration of the Anatomy of the Ear, illustrated by beautiful preparations, osteological and other, which, as they passed from hand to hand, evoked audible murmurs of admiration. The papers read maintained the high standard, scientific and clinical, of the majority of those sent in, among them being that of the President, Dr. Grazzi, on a Case of Complete Deafness consequent on an Acute Meningitis "par Diplococcus de Fränkel," in illustration of which the patient (a female child) was exhibited to the audience; that of Dr. D'Aquanno (Palermo) "Sur la Paracusie de Willis"; and that of Dr. Secchi (Bologna) on the Physiology of the Middle Ear. Another feature of this sitting, as of previous ones, was the exhibition of otological instruments and appliances. Dr. Macnaughton Jones had interested the Congress by his auto-insufflating aural bag for respired air and vapours, his magnifying aural speculum, pliable nasal bougies and dilators, his turbinotome and scale with rule for operation on the mastoid, antrum, temporo-sphenoidal lobe, and cerebellum; and on Thursday morning Professor Gradenigo exhibited an original and ingenious "diapason," ably criticised by Dr. Dundas Grant. Mr. Cresswell Baber followed with a demonstration of new additions to the "armamentarium otologicum," which was generally admired. Detailed notice of these I need not attempt, any more than even an enumeration of the concluding papers, interesting though some of them were. In the afternoon the Congress adjourned to the *aula magna*, where President Grazzi formally closed its labours with cordial congratulations to its members and office-bearers on the results. Other speakers followed, among them Professor Politzer, who eloquently thanked the secretaries for their assistance, and with a parting word from the Cavaliere Artimini, representing the Syndic, the fifth International Congress of Otology was an event of the past.

In the afternoon a trip to Fiesole was greatly enjoyed by the "emancipated" Congressisti and their ladies, who found much to admire in the Cathedral, the Etruscan Museum, the finely preserved ancient theatre, the baths and Cyclopean walls still in process of excavation, and, above, all in the magnificent panorama of the Apennines. The noble hexameters of Gray,

> "O Fæsulæ, amœna
> Frigoribus juga," &c.,

recurred to more than one enraptured Congressista, and may be thus rendered:

> "Oh hills of summer coolness, Fæsulæ,
> The zephyr's haunt! By Pallas' boon you shine,
> Enslivered with her own gray-glistening tree,
> The jewel of Etruscan Apennine!
> No more from Arno shall the joy be mine
> Your villas and verandahs to admire
> Around your forehead circling, line on line,
> To see your dome outsoar the cypress-spire,
> And roof o'er rustic roof hang higher still and higher."

At 8 P.M. the Congressisti and their ladies, with other guests, to the number of 150, sat down in the Politeama to a sumptuous banquet, at which Dr. Grazzi presided. The evening was a highly agreeable one, the speech of the occasion among many effective ones being Professor Politzer's who interwove with it a eulogy of Florence, in which he revealed a wonderful knowledge and appreciation of the past glories and present attractions of "Our Lady of Flowers." By 10.30 P.M. the company separated with cordial anticipations of such another successful reunion in London, the next sent of the Congress in 1899.

Florence, Sept. 27th.

THE MEETING OF THE ASSOCIATION OF GERMAN NATURALISTS AND MEDICAL MEN.

HELD IN LÜBECK FROM SEPT. 16TH TO 21ST.

(FROM OUR BERLIN CORRESPONDENT.)

THIS purely scientific association is one of the oldest in Germany, and it now assembles for the sixty-seventh time. Till 1888 it was not an association properly so called; medical men and naturalists met every year at some town which had been selected at the previous meeting. There was no permanent committee, but a president, secretaries, treasurer, &c. were elected for each session, and their office only lasted till its close, the preparatory business being done by medical men and naturalists of the locality selected. Every member of the medical profession or recognised naturalist could become a member, the membership of course holding good during the respective session only. This was the state of matters till 1888, when a change became necessary because the association, having by that time funds in hand and a library supplied by donations, required a more permanent administration. At the Cologne meeting of 1888, therefore, by-laws and rules were passed by which the formerly free association was changed into a regular society. A permanent committee was elected and the condition of membership modified. A medical man or naturalist desiring to become a member was to be elected by the committee, and his membership then was a perpetual one. Besides the ordinary members, other medical men and naturalists were admitted to the meetings as participating members, "Theilnehmer," but they had no right to read papers or to take part in the debates, and their membership terminated at the end of the congressional sessions. The scientific business of the society is carried on partly in three general sittings, when papers of a more general interest are read by leading men, and partly in the special sections, the number of which this year was no less than thirty-three.

The First General Meeting, on Sept. 16th.

The Mayor, in the name of the senate and the presidents of the medical and of the naturalists' societies of Lübeck, welcomed the association. The President, Professor Wislicenus (Leipzig), expressed thanks for the hearty reception and then gave an account of the society's affairs.

Professor Klebs read a paper on Some Problems concerning the Physiology of Generation. He said that whilst the structure even of the most complicated organs is completely investigated the function of many of them is still little known. The problem of generation, for instance, is still unsolved. It is very important to know if generation can be influenced by external conditions. The general opinion is that the generative power is essential to the nature of the beings and therefore withdrawn from our researches; this opinion is totally wrong. There are two modes of generation in plants and animals—the sexual and the asexual. The experiments of Professor Klebs prove that asexual generation, which exists in the algæ, the ferns, the fungi, and in the lower plants, is strictly dependent upon external influence, upon light, temperature, organic and inorganic stuffs. The physiologist may, by his knowledge of the respective agents, compel plants or animals to generate or prevent them from generating. But also the formation of sexual organs may be accelerated or suppressed according to the will of the physiologist. All conditions which tend to suppress the growing of the lower plants accelerate their sexual generation; generation and growth are adversaries, of which one only can prevail in the organism and requires the whole power supplied by the nutrition. Full light is favourable to the formation of the sexual organs, whilst in softened light the nutritive and growing power prevails, the generative organs degenerating to sterility. In looking upon the fact that in the more highly organised animals sexual generation is exclusively present, one becomes induced to ask why this complicated mode has taken the place of the more simple and effectual asexual one. Some zoologists are of opinion that sexual generation is a primary function of the organism. They found their rather mystic opinion, among other arguments, upon the fact that infusoria generate only for a short time in an asexual way, and that they degenerate if they are not from time to time sexually impregnated. But many lower plants, when their sexual generation is artificially suppressed, may be kept fresh and continue to grow. Many other organisms, such as bacteria, fungi, &c., have exclusively asexual generation. Also the sexual generation can be suppressed by artificial agents, such as acids, and stimulated by other means. The physiologist is able to make plants and animals to a certain degree grow and generate as he likes, and no mystical power exists which may determinate these functions.

After Professor Klebs's rather theoretical paper Professor Behring rose to deliver a very practical speech on the Results and the Objects of Serotherapy. The celebrated discoverer of the diphtheria antitoxin began by pointing out the great value of statistics in determining the efficacy of a new remedy. Alluding to the antitoxin debate in the Berlin

Medical Society,[1] he remarked that the time was passed when medical men ought to use expressions like "genius epidemicus" and attribute to it the degree of mortality. He stated that vaccination had succeeded in compelling the genius to withdraw, and that the genius epidemicus of small-pox epidemicus of malaria must in a large proportion of cases leave the victim when quinine is used. To prove that antitoxin had the same effect on the diphtheria genius was the purpose of his speech. In the above-mentioned debate one of the principal arguments of Professor Behring's adversaries had been the alleged fact that, whilst formerly grave cases of diphtheria only were treated in hospitals, since the antitoxin period a greater number of mild cases were received. This argument could easily be rebutted by statistics, these showing that in 1893–94 55·9 per cent. and in 1894–95 52·9 per cent. only of all diphtheria cases were treated in hospitals. The total hospital mortality was 21·1 per cent. and that of home patients 26·8 per cent. In the four years preceding the antitoxin period there were in Berlin 15,958 cases with a mortality of 5617, or 35·2 per cent. The year 1894–95 showed a widely spread epidemic in Berlin, not less than 5578 cases having been registered by the health officer, a fact not very favourable to the statement of a mild genius epidemicus. If the mortality had been the same as in the other years 1963 patients would have died, whereas last year's mortality was only 1056 patients; in the antitoxin era, therefore, 907 lives were saved. A most striking result, too, was afforded by the comparison of two hospitals, one having used and the other having abstained from employing antitoxin. In the Charité Hospital in the first class there were 299 patients with 53 deaths, or 16·7 per cent.; in the Bethania Hospital, where antitoxin was excluded, there were 249 patients with 112 deaths, or 43 per cent. This exclusion of antitoxin Professor Behring sarcastically declared to be of great value to the statistics, but not so in the interests of the patients of the Bethania Hospital. A collective investigation of home-treated cases showed a mortality of 7 to 8 per cent. only—i.e., half the number of hospital cases. There were also numerous other interesting statistical tables reported by Professor Behring, which I must abstain from mentioning. If in the future the quantity of the remedy injected was sufficiently great, and mild and grave cases were both treated by antitoxin, the statistics surely would be still better. An early application, too, must be regarded as a matter of extreme importance, and, as it was proved by Escherich's and Bose's communications, that in that case tracheotomy might be avoided. The mortality of this terrible illness, Professor Behring was sure, could be made to fall to 5 per cent., but if only 75 per cent. of deaths were avoided 45,000 lives would be yearly saved in Germany. Even now, when the application of antitoxin is still in its infancy, the mortality had fallen to 75 per cent. of the former amount, so that 15,000 people had escaped from death. The immunising effect was not yet so obvious as the curative one, because the number of cases reported was still too small; but up to the present no case had occurred where real harm had been done by the prophylactic injection. After having shortly spoken of the anti-tetanic and the anti-choleraic serum, Professor Behring closed by saying that everything which he and others had done in this direction was based upon the immortal researches of Professor Koch.

The Second General Meeting, on Sept. 18th.

Professor Riedel (Jena) first read a paper on Surgical Operations on the Skull. As, of course, the audience was not composed of medical men only, he dealt with the subject in a somewhat popular manner; therefore, a short account will be sufficient. He mentioned that trephining was long ago performed by the Incas, the ancient inhabitants of Mexico, and also by the Romans, as the discoveries of Pompeii and Herculaneum proved. To-day we trephine for fractures, for hæmorrhage from the meningeal arteries, and for cysts, suppuration, and tumours. In the last case the principal obstacle is the difficulty of diagnosis and localisation. Of 100 tumours six only are found and operated on; in three of those death occurs from the operation, so that 3 per cent. only have a favourable issue. Another drawback is that often a great deal of the brain must be removed owing to the operation. The results of trephining for injury are better. Suppuration often arises from apparently insignificant causes, and Professor Riedel mentioned a case where a cerebral abscess followed a slight wound received in a student's duel where the necessary antiseptic precautions had been neglected.

After Professor Riedel, Professor Victor Meyer (Heidelberg) read a paper on the Problems of Atomicity.

(To be continued.)

[1] THE LANCET, Jan. 19th, 1895.

THE IRISH WORKHOUSE INFIRMARIES.

(BY OUR DUBLIN CORRESPONDENT.)

MANY allusions have been made in THE LANCET during the last four months to the unsatisfactory condition of some of the workhouse hospitals of Ireland. It will be remembered that early in June a circular was addressed by the Irish Medical Association to the medical officers of all the Poor-law infirmaries, the replies to which disclosed the absolute necessity for a widespread reform in the management and nursing arrangements of many of these institutions. On June 25th an influential deputation, organised by the Irish Medical Association, and consisting of its chairman and secretary, the President and Vice-President of the Royal Colleges of Physicians and Surgeons, the President of the Royal Academy of Medicine, &c., waited upon the Local Government Board and made some suggestions the outcome of which was a circular letter from the Board directing the attention of the Poor-law guardians to "the alleged insufficiency of the nursing and requesting that the medical officer of each workhouse might be called upon to furnish a report on this most important matter." Many irregularities and defects in the nursing and administration of the Poor-law infirmaries have since been brought to light.

The South Dublin Union Infirmary has been looked upon as a model institution, but Mr. Lenehan, one of the guardians, recently made the suggestion that trained nurses should be employed to see after the patients there. His statement, and the comments of the *Irish Figaro* on the matter, had the effect of calling forth a letter addressed to that journal by Sir Robert Sexton, the Protestant and Conservative chairman of the board of guardians, in which strong testimony was made to the improvement in moral tone, in regularity, cleanliness, &c., which had followed the introduction of the members of a community of nuns—the sisters of mercy—as nurses to the institution.

In the meantime an investigation was held at Athlone by one of the Local Government Board medical inspectors as to the condition of the union infirmary there, in reference more especially to the nursing arrangements, and a correspondence took place between the Local Government Board and the board of guardians, in which the former threatened to dismiss the board of guardians unless their requirements as to the nursing were carried out. The guardians wished to appoint as nurse in the infirmary a nun belonging to a religious community of ladies, while the Board refused to sanction the appointment on the ground that the lady was not a trained hospital nurse. The guardians then suggested that she should be duly trained in a Dublin hospital, to which the Board assented. According to the local papers the Roman Catholic Bishop of the diocese now intervened and refused to permit this arrangement, giving as a reason that it was against the rules of the religious order to which the lady belonged for her "to undergo training in the manner required." The guardians then declared that they would adhere to their appointment of the lady mentioned, notwithstanding the threat of the superior court to dissolve them. That threat has been promptly transmuted into action. The guardians have been dismissed by a sealed order, dated Sept. 21st, and two paid guardians, at an annual salary of £250 each, appointed in their place. The above is a plain statement of the condition of affairs at the Athlone Union, the situation not being caused by any difficulty from want of funds. Mr. Gerald Balfour, the Chief Secretary for Ireland, not long since stated in the House of Commons, and doubtless with perfect accuracy, that the shortcomings in some of the union workhouses in the West of Ireland were really caused by the poverty of the districts. This excuse does not apply to the board of guardians at Athlone, for it has transpired that the union there is in an excellent financial position, and, according to the statement of the

late chairman of the dissolved board, has at present a balance of over £2000 to its credit.

A leading article of a somewhat unwise and intemperate character appeared in the *Freeman's Journal* of Saturday last headed "Intolerant Bureaucrats," in which the action of the Local Government Board in this matter is attributed to religious bigotry. According to the report in that journal the Roman Catholic Bishop stated that "the nurse (who had been at the Athlone Infirmary for five years) had actually been trained for five years. They, the nurses" (he is said to have stated) "have undergone training at least as good as they could undergo in any Dublin hospital." Now it seems unnecessary to say that nurses in Dublin, as in London and elsewhere, are now obliged to undergo a course of study and training of at least two years' duration in a duly recognised clinical or teaching hospital in which classes of students of medicine are also trained or taught. The probationer nurses are taught not only the mere technique of nursing the sick, but also the principles which underlie it. They are obliged to learn the elements of anatomy, physiology, medicine, and surgery in order that they may be qualified, not alone to strictly carry out, but also to fully understand and appreciate the directions of a medical man in charge of a patient. Their experience and training in a teaching hospital places them accordingly in a distinctly different position from that of the ordinary lay nurse, for they are taught what they should do in cases of difficulty and emergency in the absence of any medical man and during the time that must often intervene before his arrival. The very fact that the most intelligent probationer nurse cannot be made proficient in her course in a less time than two years or more shows that her task is not an easy one. No certificate of training and no authentic diploma or authoritative statement of the person being "a trained nurse" is given in Dublin or in London, or elsewhere in England, under less stringent conditions.

The whole matter is a most important one and has begun to excite great interest in Ireland, not alone among the members of the medical profession, but also among the educated general public. When it is remembered that in no fewer than sixty-seven of the union infirmaries throughout this country the nursing is controlled or carried out by nuns, who, while their unselfish devotion to works of charity is universally recognised, have not received what is understood as hospital training, the importance and possibly far reaching effect of the recent action of the Local Government Board in dissolving the Athlone guardians will be recognised.

BIRMINGHAM.

(FROM OUR OWN CORRESPONDENT.)

Epidemic of Scarlet Fever.

THE increase in the number of scarlet fever cases in the city is a source of much anxiety to the Health Committee. At present there are 457 cases under treatment at the Borough Hospital. It is alleged that some of the cases are sent out too soon, and thus become centres for the further spread of the disease. The difficulties of the committee are being met by utilising the new small-pox hospital at Yardley, where it is proposed to send a number of the scarlet fever patients forthwith. Fortunately, there is not a single case of small-pox in the hospital for the reception of such cases. The medical officer of health, Dr. Hill, believes that the increase is periodic, being due to the accumulation of susceptible material. This is hardly a satisfactory explanation of the present rapid increase. It fails to bring consolation to the sufferers or to the authorities in dealing with so severe an outbreak as the present one.

Periodical Collections for Local Charities.

The committee recently met to make the necessary arrangements for the collections to be made on Hospital Sunday, Oct. 27th. The chairman, Alderman Johnson, stated that this was the thirty-seventh occasion on which the appeal would be made. At the first collection, in 1859, it was pointed out that the sum raised was £5200; this has been the average sum, with little alteration, ever since. With regard to Hospital Saturday, the first collection, in 1873, realised £4705; this has gone on steadily increasing, until last year it reached the large sum of £13,000. Three reasons were adduced to show why the Hospital Sunday collections had not increased in the same proportion: (1) those who furnished the largest contributions on Hospital Sunday were the people who were the regular subscribers to the charities throughout the year; (2) since the movement was founded the number of medical charities had been doubled, and they required support from the very class of people from whom they expected large contributions on Hospital Sunday; and (3) that the resources of the great almsgiving classes were not now what they were in 1859. Profits from trade had decreased, interest from investments was less, and it required an effort on the part of the classes who supported Hospital Sunday to keep up the level of their contributions.

The Lunacy Act.

At the Police-court, on Sept. 30th, Mr. F. R. A. Evans, a surgeon, was summoned for a number of offences under this Act in the alleged wrong treatment of a patient under his care. After evidence had been given the defendant was committed for trial at the Quarter Sessions, bail being allowed, the defendant in £50 and a security of £25.

Medical Men, Coroners, and Death Certificates.

The death of the Rev. Prebendary Finch Smith at Lichfield was the subject of an inquest, at which the deputy coroner, Mr. H. H. Jordan, made some strong remarks. It seems that Prebendary Finch Smith, who was eighty years of age, fell downstairs a few days previously, sustaining an injury to his side, from which he never rallied. A certificate of death was given by his medical attendant. A verdict of "Accidental death" was recorded. The deputy coroner observed "that he felt bound to express his regret that the doctor was not better up in the law than to have given a certificate of death in case of an accident, and that the Deputy Registrar of Births and Deaths had not been better coached in his work than to have accepted such certificate and registered it. Luckily the inspector of police heard of the accident and duly reported it, otherwise there might have been great trouble and annoyance caused to the family." The medical attendant justified his action by the authority of the British Medical Association, to which the deputy coroner took exception as not being a legal authority. It seems that some friction of the same kind had previously existed, hence the disposition to lay down the strict interpretation of the law in its present form in terms which, however much to be criticised, are still the legal ones.

Ambulance Instruction in the Police Force.

The chairman of the Watch Committee recently distributed a number of certificates in these classes and made a presentation to Dr. Holdsworth and Mr. Morrison, divisional surgeons, for the assistance they had rendered in the principles and practice of the work. The assembly was well attended.

The late Dr. Wesley Hayes Thompson of Cradley.

The death of Dr. Thompson at the comparatively early age of forty-five cast a gloom over the district, in which he held an extensive practice. Essentially a self-educated man, he became an apprentice of Dr. Morrow of Cradley Heath, and afterwards went to Anderson's College, Glasgow. In 1871 he took the L.R.C.P. and L.R.C.S. of Edinburgh, and in 1889 the M.D. of Durham. An active and intelligent worker, he soon rose into a prominent position and laboured unceasingly in a large club and colliery practice. His upright conduct and his unassuming manners gained him respect and confidence. He was an earnest advocate of temperance and a devoted member of the Wesleyan body. Some two years ago his health began to fail, and malignant abdominal disease was suspected. Gradually his strength failed, and he passed away on Sept. 26th, leaving a name widely honoured and deservedly esteemed. Mrs. Thompson and seven children mourn their loss, receiving wide and universal sympathy in the district in which Dr. Thompson was born and in which he did so much good and faithful work.

Oct. 2nd.

BRISTOL ROYAL INFIRMARY.—At the half-yearly meeting of the Bristol Royal Infirmary held last week the chairman stated that increased subscriptions were urgently needed as the annual income still fell far short of what was required. A timely and anonymous gift of £1000 had been recently received, but what was wanted was an increase in the regular annual contributions.

SCOTLAND.

(FROM OUR OWN CORRESPONDENTS.)

Inauguration of the New Waterworks for Edinburgh.

FROM time to time the question of an additional water-supply for Edinburgh and district has been referred to in THE LANCET. It has been spoken of for some years, and some persons were most anxious to have the work commenced long ago. Fortunately more prudent counsels asserted themselves, for it has been found that some of the proposed schemes were unsuitable or extremely costly. Now all parties have agreed upon the Tala scheme, the Tala being one of the head waters of the Tweed, and on Saturday last the inauguration of the works connected with this important scheme took place with becoming pomp and suitable ritual. The Lord Provost of Edinburgh, his lady, and the members of the Water Trust were the more prominent actors, but several Members of Parliament and others participated in the proceedings. The religious part of the service was conducted by Mr. S. R. Crockett with impressive solemnity.

The Prosecutions under the Pharmacy Act in Edinburgh.

Last week mention was made of these prosecutions. The acting Sheriff-Substitute has given his decision in two more of the cases. In the case of a photographic chemist the Sheriff, after referring to a circular issued by the respondent announcing that he did not sell poisons unless in wholesale quantities and after reviewing the evidence, held the charge not proven. A further charge of having used and exhibited the name and title of chemist was also found not proven, the Sheriff saying that he did not think the use of the term "photographic chemist" represented him as a chemist in the sense intended by the Act. In the case of one of the scientific instrument makers and technical chemists, the Sheriff found that the sale was a retail transaction, and inflicted a nominal fine of 1*s.* with 2 guineas costs; the second charge was found not proven. Notice of appeal was given on behalf of the Pharmaceutical Society.

Scottish Association for the Medical Education of Women Edinburgh.

The Medical College for Women under the auspices of this society is so prosperous that the quarters they have hitherto occupied in Chambers-street have been found to be too cramped. The association has had the matter under consideration for some time, and when the opportunity offered of obtaining accommodation in Minto House they seized it. The secretary's office is to remain for the present at the old address, but the practical anatomy and other classes are to be held in Minto House. It is understood that the Edinburgh University approves of this change of quarters.

Medical Appointments and Resignations.

The following appointments are intimated at the Western Infirmary, Glasgow: Wm. McLennan, M.B., to be physician to the dispensary; James Carslaw, M.A., M.B., and Hugh Galt, M.B., to be extra-physicians to the dispensary. At the September meeting of the Greenock Parish Council, Wm. S. Cook, B.Sc., M.B., was appointed Assistant Medical Officer to the poorhouse, vice Dr. Holmes, resigned. The Paisley Parish Council have appointed T. Neil Robertson, M.B., C.M., to be resident medical officer at Riccartsbar Asylum, vice Dr. M'Coll, resigned. Dr. Thos. Easton, who has been acting as interim medical officer for the burgh of Stranraer, has sent in his resignation to the town council, as the authorities have neglected to adopt some of his recommendations for dealing with the outbreak of diphtheria from which the town is at present suffering.

Honours to Medical Men.

Dr. John A. Jamieson, Brodick, has been sworn in as an Honorary Sheriff-Substitute for the Island of Arran. Dr. A. Robertson-Fullarton of Kilmichael and Whitefarland, Arran, has been gazetted a Deputy-Lieutenant of the County of Bute.

Fifeshire Medical Association.

The fourteenth annual general meeting of this association was held in Kirkcaldy on Sept. 27th. The President, Dr. Sutherland Mackay, medical officer of health of Kirkcaldy, read a paper on "The Black Death of the Fourteenth Century."

New Infirmary at Helensburgh.

The new building, which has been erected at a cost of about £5000, was formally opened on Sept. 27th by Mr. Alexander Wylie, M.P. for Dumbartonshire. The proceedings attracted much interest in the town, and were witnessed by the majority of the local medical men and leading citizens. Helensburgh is certainly to be congratulated upon the enterprise and public spirit of which the new infirmary is the expression. Until recently there was in the town but a single hospital; in this ordinary medical and surgical cases were treated together with patients suffering from infectious diseases. This unsatisfactory state of matters has now been remedied, and in future the older building, which has been considerably improved, will be used exclusively for the reception of infectious cases.

Glasgow University: Anatomy Fees.

The changes in the arrangements of the Scottish Universities resulting from the action of the Universities Commission have, as was to be expected, not produced universal satisfaction. One of the latest grounds of complaint is in connexion with the fees to be paid for the study of practical anatomy. Under the old system—when fees were paid directly to the Professors—it was the custom of the Professor of Anatomy to allow any student who had paid in fees up to a certain sum to have access to the dissecting room at any subsequent part of his course. But under the new regulations—each Professor receiving a certain fixed income, and the fees being collected by the University Court—this privilege has been withdrawn, and no student has now the right to make use of the dissecting-room unless he has paid a fee for practical anatomy for the session in which he wishes to study dissections. It is pointed out that such an arrangement will discourage the study of practical anatomy, and will tend to limit men to the minimum of dissection demanded by the Examining Board. It also has the effect of keeping students who have passed their examinations in anatomy away from the dissecting-room, to which it is surely desirable the student should make an occasional visit, during the whole of his medical course. The University Court it is to be hoped will reconsider the matter.

Infectious Diseases (Notification) Act.

The public is only slowly becoming aware of the responsibility imposed upon its members by this Act. Though every possible step has been taken to make its demands known, numbers of parents seem to be quite unaware of its existence. The county council of Renfrew has recently entered upon an "educating" crusade, and by securing the infliction of fines upon parents who neglect to notify the existence of measles in their families are probably adopting the most certain method to enforce a knowledge of the Act and its provisions upon others similarly situated.

Aberdeen University.

The list of honorary degrees to be conferred by the senatus at the inaugural celebrations this month has just been published. Two members of the medical profession are to receive the degree of LL.D. One of these is George Skene Keith, M.A., M.D., who is a graduate in arts of Aberdeen, and studied medicine at Aberdeen, Edinburgh, Pesth, and Paris. He was assistant, and for five years colleague, to the great Sir J. Y. Simpson, and for thirty years afterwards (till 1880) practised his profession in Edinburgh. The second is Sir James Reid, Physician-in-ordinary to the Queen. Sir James Reid graduated M.A. at Aberdeen in 1869, with honours in natural science, being also the Natural Science Prizeman and Town Council Gold Medallist. He then studied medicine at Aberdeen and graduated M.B., C.M., with highest honours in 1872, and subsequently took his M.D. in 1875. He studied at Vienna for two years and then entered on the practice of his profession at Ellon in conjunction with his father. In 1881 he was appointed resident physician to Her Majesty, in 1887 he became physician extraordinary, and in 1889 physician in ordinary. He became a Member of the Royal College of Physicians of London in 1887 and a Fellow in 1892. He was created a Companion of the Bath in 1889, and in June last he was made a Knight Commander of the Order; he also possesses the Red Eagle of Germany (Third Class) and the Saxe-Ernestine Order of Coburg-Gotha (First Class). Among the other recipients of the degree of LL.D. are the Duke of Richmond and Gordon, the Earl of Erroll, the Earl of Southesk, Sir J. Forbes Clark of Lilliepronie, Lord Provost Stuart, &c.—

The preliminary examinations for Arts and Medicine are in full swing this week. There are thirty candidates for the Medical preliminary and 220 for the Arts preliminary, a falling off of about twenty since last year. Greek is as popular as ever, but then it still counts more than modern languages for the Bursary competition, which is decided by the same papers as the preliminary examination.—Dean of Guild Walker has presented to the Senatus "Minstrel" Beattie's violoncello, which belonged to the late Mr. James Walker.—The bust of the late Professor Minto is now finished, and will shortly be added to the collection in Marischal College.

The Health of Aberdeen.

The zymotic diseases notified last week were: Measles, 2; scarlet fever, 21; whooping-cough, 25; erysipelas, 3; total, 51; being 6 cases fewer than the preceding week.

Oct. 2nd.

IRELAND.

(FROM OUR OWN CORRESPONDENTS.)

The Nursing in Government Prison Hospitals.

AN inquest was held in the Mountjoy Prison, Dublin, on Sept. 30th, on the body of a convict who had died there rather suddenly from asphyxia caused by some inflammatory disease of the throat. The coroner made some strong comments on the system of nursing at the institution; and the jury added a rider to the verdict "that the nursing system in the prison hospital was defective and ought at once to be improved."

Death under Chloroform.

A death under chloroform has recently occurred at the Coombe Lying-in Hospital, Dublin. The patient, a woman aged forty-eight years, was about to undergo an operation at the hands of Dr. F. Kidd, the master of the hospital, and chloroform was being administered by one of his assistants when a sort of spasm occurred and the woman ceased to breathe. The chloroform, of which less than a drachm had been administered, was stopped at once and every effort made to restore the patient, but without avail. At the inquest, which was held on Sept. 27th, evidence was given by Mr. Kenny, who had made a post-mortem examination, that "the heart was small, flat, and flabby." The jury found "that the deceased died from cardiac syncope while under the influence of chloroform; that the chloroform was administered with all proper precautions and skill; and that no blame was attachable to any official of the hospital."

Outbreak of Typhus Fever near Stewartstown.

A serious outbreak of typhus fever, a disease formerly very common in Ireland, is reported to have occurred among the poor fisher and farmer class on the shores of Lough Neagh, seven miles from Stewartstown in county Tyrone. These people live in small, badly ventilated, and overcrowded houses, and fifteen have been removed to Cookstown Infirmary. All the patients, except two whom the dispensary medical officer did not think it was necessary to compel to enter the fever hospital, have gone there. All the clothes of the patients are to be burned.

The Duties of Medical Officers, Masters, and Matrons in Irish Workhouses.

With reference to the duties of medical officers, masters, and matrons in Irish workhouses, which was raised at a late meeting of the Ballymena board of guardians by their medical officer, Dr. Davison,[1] the matter was again referred to by the master of that union at the weekly meeting on Sept. 23th, and it was decided to ask the Local Government Board to hold a sworn inquiry into the whole subject.

The Kilrea Dispensary.

The Ballymoney guardians recommended recently that the salary of Dr. Lennox, medical officer of the Kilrea dispensary, should be increased by £15 per annum, but after some correspondence the Local Government Board would only sanction an addition of £10, a decision which the guardians regard as very strange.

The Queen's College, Cork.

The annual report of the President, which has been just issued, gives some interesting details with regard to the College. The President states that the total number of students attending the College during the session 1894–5 was 222, the lowest number reached since the year 1876. I find the President of the Belfast Queen's College also reports a diminution in the attendance, which he says was the smallest for twenty years. No doubt the same influences affected both Colleges. The religious denominations of the Cork students were as follows: Roman Catholics, 137; Church of Ireland, 59; Presbyterians, 11; Wesleyans, 12; and other denominations, 5. From the opening of the College in 1849 to the year 1860 the Roman Catholic students slightly exceeded the number of Protestants, but from 1861 to 1872 the Protestants were in a majority except in one or two years. From that year forward, however, the Roman Catholic students have outnumbered, sometimes by more than two to one, all the other denominations. Since 1882 the number of Protestant students has fallen steadily, being now little more than one-half of the number of thirteen years ago. As the medical school forms an important part of the College it would be interesting to analyse the various causes that have produced the results tabulated by the President, but in notes such as these it would be utterly impossible to discuss the subject at all adequately.

Hospital Saturday at Cork.

Last Saturday was Hospital Saturday in Cork, and the weather was all that could be desired. The fair lady collectors, bearing their tinkling tambourines, were bedecked with bewitching summer costumes, and all seemed to augur well for a successful collection, but I regret to say that the street receipts were less than those of last year by about £120. The mayor, who takes a lively interest in the city charities, was much disappointed and publicly stated that the recent "unwarrantable attack on the city hospitals" was one of the most potent influences which militated against the collection. If the mayor's opinion be correct the champion of the Cork clubs can hardly congratulate himself on being instrumental in procuring the diminution of the resources for relieving human suffering and misery. However, I think it only fair to say that in my opinion the mayor attaches an undue amount of importance to the influence possessed by the gentleman to whom he refers, and as an indication in that direction I would mention that the contribution to the Hospital Saturday Fund from the working men of one of the largest firms in the city has been this year almost identically the same as it was last year. Furthermore, it is well known that the committee of management, rightly or wrongly, requested the lady collectors not to press the public, and it was a matter of general comment that the ladies, acting on the instruction they had received, did not exhibit at all the same zeal as had characterised their efforts on previous occasions. The Cork amusement committee gave important aid by providing a very varied entertainment during the afternoon. Amongst the items were musical drill by a detachment of the Royal Irish Fusiliers, and a tug-of-war between sailors from H.M.S. *Warspite* and members of the city police force, in which the constabulary men were the victors.

The Sanitary Condition of Cork.

The Public Health Committee recently appointed a sub-committee to make a general inspection of the city, and as a result of their investigations they have already recommended that in one district several of the houses be closed and demolished, and in the case of other houses that the overcrowding be reduced by permitting only two families to occupy each house. The step taken by the Health Committee is a very important one, and I have no doubt personal inspection by our city fathers will impress them far more than any number of official reports with regard to the absolute necessity for providing decent sanitary habitations for the poor of the city. The medical superintendent officer of health reports that the death-rate for the four weeks ending Aug. 24th was only 15·87 per 1000, the infectious death-rate being 2·06 per 1000. The birth-rate was higher and the death-rate lower than for the corresponding month of last year.

[1] THE LANCET, Sept. 28th, 1895.

INCREASE IN THE SALARY OF A MEDICAL OFFICER. At the last weekly meeting of the Barton Regis (Bristol) board of guardians it was stated that the Local Government Board had approved of the resolution of the guardians to increase the salary of Mr. D. E. Bernard, M.R.C.S., L.R.C.P. Edin., the medical officer to the workhouse, by £25.

RUSSIA.

(FROM OUR OWN CORRESPONDENT.)

Cholera in the Ukraine.

ACCORDING to the latest bulletin from the government of Volhynia the cholera epidemic shows no signs of abating, but, on the contrary, is rapidly increasing, both in that province and in the adjoining one of Podolia. It would, perhaps, be more strictly true to say that the epidemic *was* increasing when the last bulletin was published, now thirteen days ago, and that of its behaviour at the present moment there is no means of judging in the absence of a later announcement. The following are the returns for the periods named:—

—	Cases.	Deaths.
IN VOLHYNIA:		
Between July 23rd and July 29th	1004	322
Between July 30th and Aug. 5th	2025	718
Between Aug. 6th and Aug. 12th	2497	944
Between Aug. 13th and Aug. 19th	3352	1190
IN PODOLIA:		
Between Aug. 9th and Aug. 12th	34	20
Between Aug. 13th and Aug. 19th	67	25

At present cholera is confined to these two governments in European Russia, but it is probably from these border provinces that the infection has spread into Galicia. The disease has for more than a month been present in Tarnopol, and it is also reported from Brody and Rohatyn. In the *starostvo* of Tarnopol the earliest cases occurred at the beginning of August; up to the 11th there were 4 cases with 1 death; in the week ending Aug. 19th there were 6 cases and 3 deaths; in the following week, 17 cases and 9 deaths; and in the week ending Sept. 2nd (14th), 18 cases and 8 deaths. In the far east cholera appears to be diminishing rather than spreading, to judge by the returns from Chi-fu, on the Gulf of Pechili. The Russian Consul in that port telegraphs that in the three weeks between Aug. 13th and Sept. 3rd the deaths from cholera in Chi-fu numbered respectively 20, 14, and 12, adding in his last telegram that the disease had then "lost its epidemic character." Nevertheless, the Russian Government has ordered special precautions to be taken on the Amur and Ussuri rivers to prevent the introduction of cholera infection to the Maritime (Primorskaia) province and the provinces of Amur and Transbaikal.

A Conference on Syphilis.

The Medical Department is making arrangements to hold a conference of representatives of various public health bodies and institutions to consider the question of the spread of syphilis and the best means of combating it. The conference will meet in November, 1896. According to the programme of the conference, which has already been distributed to the local governmental authorities, the discussions will range themselves under the following heads: (1) syphilis in village communities; (2) in towns; (3) in the army and navy; (4) the medical *personnel* required; and (5) the control of prostitutes. The representatives of the St. Petersburg Army Medical Academy at the conference will be Professors Tarnofski, Lebedef, Shideofski, and Sirotinin.

The Serum Treatment of Syphilis.

On the subject of syphilis Dr. Viéviorovski published in a recent number of the *Vratch* (No. 34) a preliminary note on the treatment of five cases of syphilis by the injection of serum from the blood of patients in the tertiary stage of the same disease. The results were very satisfactory. There was subjective improvement in all the patients; there was also an unusually rapid healing of primary sores; roseola and mucous and hypertrophic papules in the mouth and round the anus disappeared after from two to four injections. The continuance of the treatment after the disappearance of symptoms did not, however, prevent their recurrence; and it was noted that in such cases a second course of injections was not followed by such rapid improvement as the first course. The number of injections given in each case was from twenty to twenty-three, an average of 10 c.cm. of serum being given in each injection. The experiments were carried out in the Military Hospital in Moscow. Full details are promised in a later communication.

The New Pirogoff Museum.

The foundation-stone of the new Pirogoff Museum of Anatomy and Surgery was laid on Thursday last. The construction of such a museum was suggested by Professor Ratimof, who is now President of the Pirogoff Chirurgical Society. The scheme was well seconded; the Government provided 30,000 roubles towards the purchase and reconstruction of a building to contain the museum, and a sum of 60,000 roubles bequeathed to the society by the late Countess Musin-Pushkin, to be expended on some memorial to the great Russian surgeon, has been put aside as an endowment of the new museum. The society has purchased a building, used as a Government store since the time of the Empress Anna, appropriately situated on the banks of the Neva not far from the Army Medical Academy and the large military hospital named after Sir James Wylie. The museum will be arranged on the lines of the Hunter collection in Lincoln's-inn-fields and that of Dupuytren in Paris. A curious incident occurred during the digging operations in connexion with the reconstruction of the building. A large quantity of human bones were found in the earth underneath the foundations. One theory in explanation of their presence is that the ground was formerly used as a cemetery; a second suggestion is that the bones are the remains of the innumerable victims who died by the axe or the halter in Peter the Great's time. Both suggestions require confirmation; there is said to be some reason for believing that the bones were deposited after the building, which dates from 1732, was constructed.

St. Petersburg, Sept. 16th (28th).

THE DIFFUSION OF SMALL-POX.—The diminution of small-pox notifications in London recorded in our last issue has continued during the week ended with last Saturday, the actual cases and admissions to hospital, as well as the number of patients remaining under treatment, being below the totals of the preceding week. Last week 21 patients were removed to the hospitals of the Metropolitan Asylums Board or to the Highgate Small-pox Hospital, against 25, 42, and 23 in the three previous weeks, and on Saturday last the number of patients still under isolation treatment had fallen to 234—a total which has been steadily diminishing for many weeks past. There were again 2 deaths from the disease registered in London last week, 1 belonging to Hackney and the other to Lambeth, both in unvaccinated infants. Some small amount of the disease has recently been recorded in the south-western counties, where active steps are being taken to prevent its spreading. A few cases occurred in Lancashire last week, of which 4 were in Manchester, but no death was reported. In Dublin during the week ended Sept. 21st 5 cases were admitted to hospital, comparing with 4 and 9 in the two preceding weeks. The number of patients remaining under treatment was 22, as compared with 15, 13, and 18 on the three previous Saturdays. There was only 1 death, the patient being a child five years of age who had no medical attendance, and was stated to have been vaccinated in infancy.

PRELIMINARY TRAINING FOR NURSE PROBATIONERS.—A new departure in the training of nurses has been undertaken by the authorities of the London Hospital, and was brought under the notice of our readers in THE LANCET of May 11th last. A suitable building, called Tredegar House, has been acquired in the Bow-road, at some distance from the hospital, as a residence and preliminary training home for twenty young women desirous of becoming probationers. These pupil-probationers will receive instruction in the household duties, such as sweeping, dusting, &c., which they will subsequently have to perform in the wards, and they are expected to become proficient in sick-room cookery, bandaging, and such details of practical nursing as can be conveniently taught. They will also attend lectures and classes in elementary physiology, anatomy, and hygiene. After six weeks' preliminary training the pupils who are deemed suitable will be transferred to the hospital for a month's trial, and the three years' engagement to the hospital will count from the commencement of work in the wards.

Obituary.

LOUIS PASTEUR.

OUR PARIS CORRESPONDENT writes:—The daily papers will have already informed the readers of THE LANCET of the death of Louis Pasteur. These same lay journals will, moreover, have supplied them with details of his private life and scientific career which I may, unconsciously, repeat in this notice. But the Paris representative of an organ like THE LANCET cannot be silent on such a momentous and painful occasion, and I therefore proceed to communicate to its readers the impressions reflected in my mind by the disappearance of this great man. Pasteur died at 5 P.M. on Saturday, Sept. 28th, at Garches, in that part of the domain of Villeneuve-l'Étang placed at his disposal for the study of rabies by the municipality of Paris. The house occupied by M. Pasteur and his family is extremely modest in extent and in style. It formerly sheltered the piquet of the Cent Gardes attached to the Imperial château of Garches. The château itself was destroyed after the Franco-Prussian War, but the floor beneath that in which M. Pasteur breathed his last is still occupied by horses—not, indeed, troop horses, as in old times, but horses vaccinated against diphtheria, and supplying the precious fluid antitoxin. In 1868 M. Pasteur had an attack of cerebral hæmorrhage which left behind it permanent hemiplegia of the left side. It is a remarkable circumstance that such a grave pathological occurrence did not incapacitate him from pursuing his onward scientific path. I am sorry to say that ill-health was coincident in its onset with the virulent attacks made on him by one of our own body—the late Professor Peter—when in 1886 his earliest anti-rabic discoveries were communicated to the scientific world. The annoyance caused by these attacks brought on insomnia and palpitations, culminating in a condition of heart failure, which necessitated a sojourn during the winter of 1887 in M. Bischoffsheim's villa at Bordighiera. An earthquake compelled a premature return to Paris, symptoms of heart failure reappeared occasionally, and albuminuria was superadded. Several times, especially in 1892, disquieting attacks of uræmia were a source of anxiety to his *entourage*. On Nov. 1st of last year a fresh attack kept him in bed for several months at his residence in the Institut Pasteur. The healthy surroundings of Garches contributed greatly to re-establish his strength, but the remarkable heat of the summer of the present year proved too much for him, and uræmic symptoms reappeared. The treatment prescribed by his medical attendants, Drs. Chantemesse and Metchnikof, had the desired effect until Wednesday, Sept. 18th, when a recurrence of uræmia occurred. Temporary improvement was followed on Sunday, the 22nd, by a relapse. His pupils of the Pasteur Institute nursed him in relays, but on the morning of Thursday, the 26th, the situation became so alarming that messages were despatched to his intimate friends, who — Professor Granche amongst the number — hastened to his bedside. Dr. Roux, who was in the department of Charente, reached Garches on Saturday morning, when the illustrious sufferer was almost comatose and a prey to intense uræmic dyspnœa. About 5 P.M. he died, surrounded by his devoted wife, his daughter (Mme. Vallery-Radot) and her husband, his nephew (Maurice Loir) and his mother (M. Pasteur's sister), Drs. Chantemesse and Metchnikof, and M. Nocard. He had not spoken a word since 4 A.M., when, Mme. Pasteur and his daughter asking if he felt any pain, he feebly answered "Oui." This was the last word he uttered. All being over, his devoted pupils, Drs. Chantemesse and Metchnikof, performed his last toilette on earth, Mme. Pasteur placed a scarf around his neck, the arms were crossed over the breast, and a crucifix fixed between his hands. M. Pasteur's nephew, Maurice Loir, was authorised to make a sketch in crayons of the body, but no photograph was allowed to be taken. The Curé de Garches and a Dominican Father visited the deceased on the day of his death. It is said that M. Pasteur was quite cognisant for a long time before the fatal *dénouement* of the danger he was in. Some time ago, embracing his little grandchildren, he suddenly broke down, and, in explanation of his emotion, said, "C'est parce que je vais vous quitter, mes enfants." His only son, M. Jean-Baptiste Pasteur, First Secretary at the French Embassy at Madrid, reached Garches two hours too late to see his father alive. The Ministry *au complet* inscribed their names on Sunday in the register installed at the entrance of the park of Villeneuve l'Étang, as also did numerous deputies and senators as well as members of the Institut. M. Poincaré, Minister of Public Instruction, announced to the widow and son of the deceased the intention of the Government to sanction a national funeral and interment in the Panthéon. Mme. Pasteur, while agreeing to a State ceremony, informed the Minister that her illustrious husband had always expressed a desire to be buried close to his laboratory in the Rue Dutot (Institut Pasteur). After the departure of the Ministers the *chefs de service* of the Institut Pasteur proceeded to embalm the body, and, Mme. Pasteur having been induced to take needed rest, the body was watched by Drs. Roux, Duclaux, and Prevot.

LOUIS PASTEUR.

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Born at Dôle (Jura), his father being a poor working tanner, Louis Pasteur owes his pre-eminence entirely to his own intelligence and pertinacity. Even when Louis was only two years old his father entertained hopes of future greatness for him. M. Pasteur was fond of recalling an oft-repeated desire thus expressed by his father: "Ah! si tu pouvais devenir un jour professeur, et professeur au collège d'Arbois, je serais l'homme le plus heureux de la terre." What would the good tanner have said if he had known that, fifty-eight years later, in the presence of his son now covered with glory, a tablet would be placed on the walls of the modest house in the Rue des Tanneurs bearing the following inscription in letters of gold:—

Ici est né Louis Pasteur
le 27 Décembre, 1822.

In 1825 the family left Dôle for Arbois, a small town (in the same department) of (now) 5000 inhabitants. Here, in the small tannery bought by his father, Louis passed his early years. In due course he was sent as a day-scholar to the *collège communal*. He, the youngest of all the scholars, was so proud to pass the portals of this institution that he arrived with an armful of huge dictionaries of which he was in no need whatever. His father utilised his short leisure in helping Louis with his lessons.

The little one was, it appears, not always over-anxious to join his father on these occasions, preferring to engage in fishing or in taking a pastel drawing of a neighbour's lineaments. A dozen of these portraits still exist in different houses at Arbois, and their excellence is so striking for a boy aged thirteen that a short time ago an old *Arboisienne* exclaimed: "Quel dommage qu'il se soit enfoncé dans un tas de chimie; il a manqué sa vocation, il serait arrivé à se faire une réputation de peintre." But Louis soon showed the grit lying hidden in his character, and when, applying himself seriously to work, he easily distanced all his companions the principal of the college uttered a prophecy destined to be amply realised: "Il ira loin." The Arbois College being minus a *Professeur de philosophie* young Pasteur left for Besançon, where, after one year's study, he took his degree of *Bachelier ès Lettres*, and was immediately appointed an assistant master. His leisure time was devoted to attending lectures on higher mathematics in view of admission to the examination in science at the École Normale of Paris. His bent towards the study of chemistry was at this period of his existence but too evident from the embarrassing questions he was wont to put before the entire class to his old professor, Darlay, who, poor man, was at last constrained to say that it was for him to ask Pasteur for information instead of the reverse. At the examination for admission into the École Normale, Pasteur was No. 14 on the list. Although admissible, being dissatisfied with his place on the list he resumed his preparation, with the result that the following year he was classed fourth. Now, with Dumas at the Sorbonne and Balard (the discoverer of bromine) at the École Normale, he could give free play to his chemical curiosity. Chemical manipulations were all he cared for, all he thought about, and when his comrades would employ their spare moments in recreation he would shut himself in with his beloved flasks and crucibles in order to satisfy that craving for light that was destined to lead him to such marvellous and beneficent discoveries. Now came his first discovery. His delight was so overpowering that he rushed out of the laboratory, and meeting the *préparateur* of the physics lectures he fell on his neck, exclaiming: "Mon cher Monsieur Bertrand, je viens de faire une grande découverte. J'ai séparé le paratartrate double de soude et d'ammoniaque en deux sels de dissymétrie inverse et d'action inverse sur le plan de polarisation. Le sel droit est de tout point identique au tartrate droit. J'en suis si heureux que j'éprouve un tremblement nerveux qui m'empêche de remettre de nouveau l'œil à l'appareil de polarisation. Allons au Luxembourg, je vous expliquerai cela." This discovery created a profound sensation at the Académie des Sciences. Biot, appointed by his colleagues, amongst whom were numbered Arago, Dumas, and Sénarmont, exacted of Pasteur the verification of every point in his discovery. In September, 1846, he was appointed *agrégé des sciences physiques*, but he continued his connexion with the École Normale until 1848 in the capacity of *préparateur* in chemistry. In 1847 he took his degree of D.Sc., and the following year he undertook the duties of Professor of Physics at the Dijon Lycée. Three months later, however, he was called to the temporary occupation of the chair of Chemistry at the Faculty of Sciences of Strassburg, his appointment being rendered definitive in 1852. Towards the end of 1854 Pasteur, as Dean, was entrusted with the organisation of the newly created Faculty of Sciences of Lille. In 1857 he returned to Paris as the scientific director of his old school, the Ecole Normale. He had then been married for seven years, having espoused during the tenure of the professorship of chemistry at Strassburg the daughter of M. Laurent, the Rector of the Strassburg Academy. In 1852 their only son, Jean-Baptiste, was born. The other children, four daughters, were all born in the Rue d'Ulm, Paris, where Pasteur laboured until the Institut Pasteur was built. Three daughters are dead, the surviving one being the above-mentioned Madame Vallery-Radot. In December, 1862, M. Pasteur was appointed Professor of Geology, Chemistry, and Physics at the École des Beaux Arts, and also member of the Institute. A few years later he became the permanent secretary of the Institute; this post he retained until 1889, when he assumed the direction of the Institut Pasteur. In 1881 he was elected an Immortal, taking the *fauteuil* of Littré at the Académie Française. Amongst the other honours accorded to him may be mentioned the Rumford Medal, conferred in 1856 by our Royal Society for his researches on the polarisation of light with hemihedrism of crystals. The Jecker Prize was awarded him in 1861 for his chemical labours. In April, 1874, at the instance of a commission entrusted with the examination of his works, the Minister of Public Instruction proposed to the National Assembly that a national life pension of 20,000 francs (£800) a year should be given him. This was adopted. Since 1881 M. Pasteur was Grand Cross of the Legion of Honour. On Dec. 27th, 1892, on the occasion of his seventieth birthday, an immense ovation awaited him at the Sorbonne, the late regretted President Carnot, all the Ministers and ambassadors, the members of the French Institute, and delegates from every known university and scientific society in the world being present to salute him. Pasteur entered the crowded amphitheatre leaning on the arm of M. Carnot, and I remember that on that occasion I sent THE LANCET a *résumé* of the admirable speech made by M. Dupuy, then Minister of Public Instruction. Sir Joseph Lister—that practical mind which, with the instinct of genius, first realised the vast importance of Pasteur's bacteriological discoveries and deductions—then delivered a speech which I transcribe *in extenso*:—

"Vraiment," dit-il, "il n'existe dans le monde entier aucun individuel auquel doivent plus qu'à vous les sciences médicales. Vos recherches sur les fermentations ont jeté un rayon puissant qui a illuminé les ténèbres funestes de la chirurgie et a changé le traitement des plaies d'une affaire d'empirisme incertain et trop souvent désastreux en un art scientifique sûrement bienfaisant. Grâce à vous, la chirurgie a subi une révolution complète qui l'a dépouillée de ses erreurs et a élargi presque sans limite son pouvoir efficace. La médecine ne doit pas moins que la chirurgie à vos études profondes et philosophiques. Vous avez levé le voile qui avait couvert pendant des siècles les maladies infectieuses. Vous avez démontré leur nature microbienne; grâce à votre initiative, et dans beaucoup de cas à vos propres travaux spéciaux, il y a déjà une foule de ces desordres pernicieux dont nous connaissons complètement les causes. Cette connaissance a déjà perfectionné d'une façon surprenante le diagnostic de ces fléaux du genre humain et a indiqué la route qu'il faut suivre pour leur traitement prophylactique et curatif. L'originalité de vos travaux sur la rage était si frappante que, à part quelques ignorants, tout le monde reconnait maintenant la grandeur de ce que vous avez achevé contre cette maladie terrible. Vous avez fourni un diagnostic qui dissipe à coup sûr les angoisses d'incertitudes qui hantaient autrefois celui qui avait été mordu par un chien sain soupçonné de la rage. Rien que cela aurait suffi pour vous assurer la gratitude éternelle de l'humanite. Mais par votre système merveilleux d'inoculations antirabiques vous avez su poursuivre le poison après son entrée dans le système et l'y vaincre."

M. Pasteur's emotion was so great that the reply he had prepared had to be read by his son. After a touching reference to his master, Claude Bernard, his discourse ended with the following profession of faith:—

"Je crois invinciblement que la science et la paix triompheront de l'ignorance et de la guerre; que les peuples s'entendront non pour détruire mais pour édifier, et que l'avenir appartiendra à ceux qui auront le plus fait pour l'humanité souffrante. Jeunes gens, jeunes gens, confiez-vous à ces méthodes sûres, puissantes, dont nous ne connaissons encore que les premiers secrets. Et tous, quelle que soit votre carrière, ne vous laissez pas atteindre par le scepticisme dénigrant et stérile, ne vous laissez pas décourager par les tristesses de certaines heures qui passent sur une nation. Vivez dans la paix sereine des laboratoires et des bibliothèques. Dites-vous d'abord: Qu'ai-je fait pour mon instruction? Puis, à mesure que vous avancerez: Qu'ai-je fait pour mon pays? jusqu'au moment où vous aurez peut-être cet immense bonheur de penser que vous avez contribué en quelque chose au progrès et au bien de l'humanité. Mais, que les efforts soient plus ou moins favorisés par la vie, il faut, quand on approche du grand but, être en droit de se dire: 'J'ai fait ce que j'ai pu.'"

M. Pasteur's last official speech was delivered on the occasion of the visit made on Oct. 24th, 1894, to the Institut Pasteur by President Casimir-Perier for the purpose of handing to Dr. Roux the insignia of Commander of the Legion of Honour. Some days before the Kiel *fêtes* Pasteur, who had been approached with the view of his acceptance of the Prussian order "Pour le Mérite," and who had refused the proffered honour, wrote to the Comte Féry d'Esclands in connexion with a proposed patriotic manifestation at the Pasteur Institute in these terms:—

"CHER MONSIEUR FÉRY D'ESCLANDS,—Je suis extrêmement touché des sentiments que vous avez exprimés; mais laissez, je vous prie, à ce que j'ai fait en toute simplicité, un caractère très simple. Je ne veux ni manifestation ni souscription.—Veuillez agreer, &c.,

"L. PASTEUR."

It is, perhaps, not generally known that, in consequence of the bombardment in 1871 of the Museum and the Jardin des Plantes by the Prussians, M. Pasteur returned the diploma of membership awarded by the Bonn University. It is said, on the authority of the *Figaro*, that the astounding reply ran as follows: "L'Université de Bonn adresse à M. Pasteur l'expression de son plus profond mépris." The funeral of M. Pasteur is fixed for Saturday next. A service will be held at Notre-Dame by special permission of Cardinal Richard, the Archbishop. The body will probably remain.

in the Cathedral mortuary until its transference to its last resting-place, the Pasteur Institute, on Oct. 23rd, which is the centenary of the foundation of the Institut de France. On Saturday only one speech will be delivered—that by M. Poincaré, Minister of Public Instruction, as representing the Government. The body will be brought to-day (Oct. 1st) to the Institut Pasteur, where the flag flies half-mast high, and the Administration des Pompes-Funèbres has already begun to hang draperies on the deceased's house situated in the grounds. Permission to bury a body in a private house has not until now been given for the last twenty-five years. Telegrams of condolence continue to pour into Garches, the senders belonging to all classes of society. Yesterday the public was allowed to defile before the remains, and a touching visit was paid to the *chambre mortuaire* by the *personnel* of the Institut Pasteur. I thought that the foregoing lengthy personal details might be deemed worthy of perusal by the readers of THE LANCET. I can only conclude by giving expression to a belief shared by everyone who has studied his life-work—viz., that in Louis Pasteur humanity has lost its greatest benefactor.

The death of Louis Pasteur has removed from among us one of the most remarkable figures in the scientific world, an enthusiast in the pursuit of truth for its own sake, who yet received his meed of honour at home and abroad, and was not without more substantial rewards. His career affords a striking illustration of the influence of apparently trifling incidents in directing the future course of a great man's life, and of the far-reaching results that may proceed from the discoveries of science even when the immediate success aimed at has been achieved, results beside which the latter sinks into insignificance. Little did he think that his researches, undertaken at the instance and for the benefit of brewers and wine-growers, would suggest the antiseptic and aseptic methods of treatment which, perfected by Lister and Semmelweiss, have been the means of saving thousands of lives annually and of rendering practicable and safe many operations which had previously been utterly unjustifiable, or that his investigations into the diseases of silkworms would, after restoring prosperity to his country, not only give a new and fruitful direction to his own biological studies, but lead to results in the hands of others trained in pathological methods which have within a quarter of a century revolutionised the whole science of communicable disease, opened up boundless fields of research, and give promise in the future of methods of prevention and cure in the strictest sense of the word which scarcely a dozen years ago would have appeared as the wildest of dreams. Yet so it has been with all he undertook; the successes he achieved, and the conclusions at which he arrived, have suggested to others lines of research and fields of discovery the borders only of which have as yet been explored and our knowledge of which is being extended every year, nay, almost every month, until the mind is lost in the contemplation of what may yet be revealed. About the year 1847 an incident, trivial in itself, turned his attention from pure and chemical physics to those biological studies on which his fame was to be built. A German firm of manufacturing chemists having observed the proneness to fermentation of solutions of impure commercial tartrate of lime, Pasteur, experimenting on pure ammonium tartrate, found that the addition of a small quantity of albumin to a solution of the salt was followed by fermentation, accompanied by the appearance of minute cells, which he showed to be the cause of the change. Thenceforth he devoted his energies almost exclusively to the study of fermentation. Caignard de la Tour had some years previously proved the torula to be a living organism, and the efficient cause of alcoholic fermentation in beer, and Schwann had shown all putrefaction to be caused in like manner by microscopic fungoid organisms. These discoveries were extended by Pasteur, who studied the phenomena of fermentation, alcoholic, butyric, acetic, and lactic, under all possible conditions of temperature and in the presence and the absence of air. He showed that each was due to a specific organism, and that different organisms were concerned in the alcoholic fermentation of wine, and of beer, and of beer brewed in the English and the German methods, as well as in the irregular and by-fermentations to which all, especially British beers, are liable. He distinguished between aerobes and anaerobes, or those which thrive best in the presence or absence respectively of air. Apparently spontaneous fermentations were, he maintained, set up, as was putrefaction, by germs floating in the air, almost ubiquitous though far more sparsely distributed in the higher regions of the atmosphere, but even there occurring in "clouds," so that fermentable liquids might be exposed at different times with different results. These views were warmly opposed by Pouchet, who adhered to the old notion of the spontaneous generation of the lowest forms of life from dead organic matter, abiogenesis as he called it; but Pasteur, supported by Professor Tyndall in this country, successfully exposed the omissions of necessary precautions which falsified Pouchet's observations. Access of air was in itself insufficient to set up fermentation if the germs it contained were destroyed by heat or caustic solutions, or even arrested by a layer of cotton-wool previously sterilised by baking. The juice taken from the interior of the grapes would not ferment if it were not allowed to come in contact with the skins to which the germs adhered, nor would the "must" from grapes crushed with their skins if they had been enveloped in sterilised wool throughout the whole period of their growth and when gathered were taken away from the vineyard, a fact of which he gave a public demonstration. The same he showed to be true of putrefaction, and thus laid the basis of the possibilities of antiseptic surgery. In 1865 he was invited by his old friend and former teacher, Dumas, to turn his attention to the prevention of the pébrine, a parasitic disease of the silkworm, the ravages of which had in twelve years reduced the annual revenue to the State from 130,000,000 to 8,000,000 francs, and threatened the utter destruction of an important industry, the prize of half a million francs offered by the Government having failed to elicit any efficient remedy. In 1859 Vittadiani and Cornalia had proved the connexion of the disease with the mobile corpuscles that previous observers had detected in the tissues of the worm and in the eggs, and shown how the infected eggs might be distinguished from the healthy. Pasteur soon found that the parasites once introduced persisted in every succeeding phase of the animal's development and were perpetuated through subsequent generations; that the worms by wounding others with the claws of their anterior limbs infected, or were infected by, one another; that the disease was spread without actual contact by their excreta and by dust diffused in the air; and that the only hope lay in rearing a fresh strain from healthy and, if need be, imported eggs, all infected worms and things capable of retaining infection having been meanwhile destroyed. Acting on this advice the growers succeeded in banishing the plague, and in a few years prosperity was restored. From this time to the end of his career Pasteur devoted his energies to the study of the communicable diseases of the higher animals, as anthrax, swine fever, the so-called fowl cholera, and others—identifying and cultivating artificially the specific microbes of each. Anthrax, charbon, or splenic fever as it is variously called, constantly present in Russia and Asia Minor, extended its ravages from time to time to other countries, and attacking cattle, sheep, and occasionally man, especially persons who inoculated themselves in the handling of hides or wool. He found that by cultivating the microbes in artificial media under conditions more or less unfavourable their virulence could be progressively reduced, and that inoculations with these "attenuated" cultures, while rarely inducing more than a slight febrile disturbance, conferred on the animal an immunity from subsequent infection, scarcely less than that which was enjoyed by the few that survived attacks of the natural disease. In his admiration of Jenner, whose follower he claimed to be, he called his operations "vaccinations" and the attenuated virus "vaccines," though differing in some essential points, and far more closely resembling the former practice of inoculation and open to like objections and dangers. We readily admit that thousands of cattle were thus rendered insusceptible, but from the impossibility of attaining uniformity in the strength of the fluids the inoculations frequently caused the death of the animals to be protected, or failed to give the desired immunity, and the practice has fallen very generally into disuse. Pasteur's last work was the search after a means for preventing the development of hydrophobia in man through the bite of rabid dogs or other animals. Here no microbe has as yet been discovered, and he thus laboured under the difficulty of not knowing the nature of the poison with which he had to deal. Since, however, it had an especial affinity for and was concentrated in the nervous centres he was under the necessity of employing extracts or

emulsions of nerve substances as he otherwise would have used culture fluids. His procedure consists in subdural inoculation of rabbits, in whom the disease always assumes the paralytic and painless type. The cords of these animals, after having been subjected to certain treatment, are used for the inoculation of others until a virus is obtained of the desired strength. In man the subcutaneous method is employed by means of a series of inoculations commencing with the weakest fluid and ending with one which, if it had been used at first, would have inevitably proved fatal. For this Pasteur has been attacked and vilified, and his statistics impunged by a certain class of humanitarians and by the anti-vivisectionists; but neither prejudice nor incredulity can disprove the fact that, with a few unavoidable failures due to easily recognised circumstances, numbers of dogs have been rendered absolutely resistant and insusceptible, and that the percentage of persons bitten, often severely, by dogs and wolves as to whose rabid state no doubt could be entertained, in whom no symptoms of hydrophobia have supervened vastly exceeds that which might have been expected under any other conditions or treatment. We should be the last to disparage the immediate results of Pasteur's discoveries, but perhaps their greatest value has been, and will ever be, found in the indications they have afforded to other investigators for opening up new fields and following further lines of research. Lister's antiseptic surgery and Koch's pure cultures are already old, but Behring's antitoxins possess incalculable advantages over attenuated toxines in culture fluids of indeterminate strength, and Tizzoni appears to have succeeded in substituting a similar product for the antirabic inoculations of Pasteur. Though his patriotism led him to refuse or return every honour proffered by the German Government and universities, it must be said that to his credit the preparation of Behring's diphtheritic antitoxin was promptly taken up at the Pasteur Institute by himself and his colleague, Dr. Roux.

Pasteur's engrossing subject of study, however, was undoubtedly chemistry, and by his death chemical science has lost one of its most ardent and successful students. Just three years after joining the École Normale he was appointed Assistant Professor of Physical Science, and in another two years he took his degree as Doctor. Later he filled the chair of Professor of Physics at Dijon, which, however, was resigned after a few months for the chair of Chemistry at Strassburg. Still another appointment he held—at Lille—before he returned to the École Normale as Director of Scientific Studies. In the meantime he had been conducting his famous bio-chemical researches and making experimental study of the phenomena of fermentation. It was at this time that Pasteur proved the presence of germs in the air by an original and ingenious experiment. He placed gun-cotton, which has the texture and appearance of ordinary cotton-wool, in a glass tube through which air was drawn for some time. The plug of gun-cotton was then withdrawn and dissolved in a mixture of ether and alcohol. A residue was thus obtained which proved to contain the seeds of organic life, as was revealed by microscopical examination and by their capacity to develop into organisms, moulds, &c. under suitable conditions. Subsequently Pasteur confirmed the correctness of the observations made previously by Latour, Schwann, and Kützing that yeast consists of low organisms which are self-propagating. The great Liebig, it is interesting to recall, opposed this vitalistic theory; he did not dispute the organised nature of yeast, but would not acknowledge that the latter itself gave rise to fermentation through its life processes. He assumed, on the other hand, the presence in yeast of an albuminous ferment which on the death of the former brought about the decomposition of the sugar into alcohol and carbonic acid. Pasteur showed that this change was not so simple as was represented in the mere splitting up of sugar into alcohol and carbonic acid, but that there were other important substances produced, as, for example, succinic acid and glycerine. This interesting formation by low organisms of an organic acid from a carbohydrate was doubtless the sign-post which led Pasteur to the investigation of the optical properties of tartaric and racemic acids. His beautiful researches on these substances have proved to be of the utmost importance, since they established the relations existing between optical activity and crystalline form, and have thrown considerable light upon the architecture of molecules. It was the foundation of stereo-chemistry or of the chemistry which treats of the position of the atoms in a molecule. When we reflect that it is the position of the atoms in the molecule which determines the properties of the substance the importance of this discovery is clear, but probably not yet appreciated to the full, inasmuch as a more extended knowledge of the constitution, and therefore of the properties, of bodies is calculated to place pharmacology and therapeutics on a sounder and more satisfactory basis. Pasteur showed that racemic acid was the double inactive form of tartaric acid, and is simply composed of equal quantities of dextro- (turning the plane of polarised light to the right hand) and of lævo- (polarising to the left hand) tartaric acid. Thus racemic acid is inactive by external compensation. By methods which are now well known Pasteur proved this by separating racemic acid into two tartaric acids optically opposite in character. Moreover, racemic acid is recovered when a solution of equal quantities of the oppositely active modification is carefully evaporated to dryness. The components of racemic acid could also be obtained, Pasteur found, by the selective action of living organisms (Penicillium glaucum). Pasteur suggested as a possible cause of these optical differences a screw-formed arrangement of the molecules. Our knowledge on these matters has since advanced by leaps and bounds, and this memorable discovery of Pasteur has since opened an almost limitless field of exploration for the chemist. Putting on one side, however, the question as to how far these researches may prove to be of direct benefit to mankind, there remains yet to be mentioned the untold good which followed the practical application of many of Pasteur's discoveries. Of national importance, for example, was the success with which he combated the "diseases"—for so he accounted them—of wine, beer, and vinegar. By the application of his studies on fermentation he was able—to take one example—to restore to his country an annual loss of wine represented by one-fourth of the total quantity produced, or amounting in value to some five millions sterling. For this and similarly great benefits conferred upon national industries he was awarded 12,000 francs by the Society of Encouragement of Paris, and an annuity of the same value by the National Assembly of France, which was supplemented further by a full retiring pension from his professorship at the Sorbonne in 1875—a post he had occupied since 1867—thus enabling him to carry on his scientific and experimental studies without the hindrances of professorial engagements. Space precludes us from enumerating several other splendid examples of the outcome of his chemical and bio-chemical researches which became of more than national importance. We may be content with mentioning his discovery of a remedy for the parasitic disease of silkworms, by which one of the most important industries of France was saved from, as it had been again and again threatened with, complete ruin; his success in the treatment of "cholera" among poultry and goitre among cattle; and, lastly, the measures which he suggested, and which were attended with excellent results, for the prevention of the ravages of the phylloxera, the worst enemy of the vineyards. Chemistry has indeed lost a faithful student and the community at large a noble servant whose keen scientific insight was devoted almost entirely to their interests and well-being.

Sir Joseph Lister has favoured us with the following remarks, which will be read with interest:—"It would be impossible in the short time at my disposal to refer even cursorily to the brilliant and far-reaching discoveries of Pasteur, which have revolutionised both medicine and surgery. I must content myself with a few words regarding his personal characteristics. His acuteness as an investigator in seizing upon essential points and his wonderful lucidity of judgment were only equalled by the patience with which he pursued what he termed *la méthode expérimentale*; and his enthusiasm was always tempered by dispassionate caution. In doing battle with the fallacious doctrine of spontaneous generation he was a keen controversialist, but his utterances were always characterised by transparent truthfulness. His rare modesty and entire freedom from affectation made intercourse with him easy and delightful. Anyone who reads the account he gave in the *Comptes Rendus* of the case of the little boy on whom he first ventured to employ antirabic injections in the human subject will see clear indications of another feature of his character—loving tenderness of heart. His splendid early work in physics and chemistry proved, indeed, how dearly he loved pure science for its own sake; yet it was undoubtedly the great joy of his later

researches that they directly promoted the good of mankind. In Pasteur the world has lost a personality as beautiful as it was great."

PROFESSOR ADOLF VON BARDELEBEN.

THE medical faculty of Berlin has lost one of its oldest and most popular members. On Sept. 25th there died Professor Adolf von Bardeleben, Ordinary Professor of Surgery, chief surgeon of the Charité, and hospital and general surgeon of the army medical staff. Although he had reached an age when the majority of medical men retire from work, he performed his manifold and responsible functions till his death; and whoever had met him in the hospital wards, in the lecture-room, or at the committee meeting of the German Surgical Association might well have believed that he would continue to do so for a long time. Bardeleben's surgical career extended over more than half a century: he began his work at the time when anæsthetics were first used, and closed it when surgery dares successfully to attack every organ of the human body. Although not personally connected with any striking inventions or methods, he was always ready to avail himself of new methods in surgery. When more than fifty years old, at a period of life when a change of habits is seldom seen in medical men, he, with the late Professor Volkmann, made the antiseptic method first known to the profession of his country, and in spite of the scepticism which Sir Joseph Lister's work met with in the beginning he was one of his most ardent champions in Germany. He had to contend against the administration of his hospital, who believed the new method to be too expensive; and he is said to have made personal pecuniary sacrifices in order to supply the necessary dressing materials for his patients. He substituted in Lister's dressing chloride of zinc for carbolic acid, and employed cheap gauze instead of the rather expensive mull. At last, within a few years he saw the great invention of Lister introduced wherever surgical work was done. The number of his literary publications was but small; he did not care to make a monograph of every uncommon case or to publish every little modification in operations as a new method—to be called, of course, after him. His principal work was the translation of Vidal's Surgical Handbook, which he revised with every new edition, so that it became the standard work on German surgery for more than thirty years. There were, indeed, few men more able to perform such a work than Bardeleben; he not only was fully acquainted with modern surgery, but he also had an intimate knowledge of the history of our science. He had read the works of the old surgeons, and in his lectures liked to cite passages from them in order to show his pupils the enormous progress of medicine. The extent of his knowledge may be illustrated by the fact that he once acted as Lecturer on Zoology in the place of his friend the late Professor Vogt, who had been elected member of the Parliament of Frankfort. We have called him one of the most popular medical professors, and indeed there are few in Berlin who were so universally liked. Although the construction of his hospital did not in any way meet the demands of modern surgical education he had a numerous and most attentive audience overcrowding the small lecture-room to which he was limited. The morning visits especially were attentively followed by the students, as he was one of the few professors in Berlin who liked to be accompanied by his pupils in the hospital wards and to demonstrate the cases. But he was not only venerated by the students, but also by the patients, with whom he was exceedingly gentle and sympathetic. Being in a position which would have allowed him to be merely an indifferent spectator of the struggle for life of his less favoured *confrères*, he nevertheless took part in every effort to improve the social condition of the profession, and till his death he was the Chairman of the Practitioners' Union of his quarter.

Professor Bardeleben was born in 1819 in Frankfort-on-the-Oder, where his father was a lawyer, and having studied in Berlin and Heidelberg he became qualified in 1842. He was elected assistant to Professor Nägeles' gynæcological clinic, and afterwards became Prosector and Teacher of Anatomy. He continued anatomical study, and from Heidelberg went to Giessen, where he began his surgical work. When still a rather young man he was elected Ordinary Professor of Surgery at the University of Greifswald, where he lived from 1848 to 1868. In 1868 he went to Berlin as successor to the late Professor Zöngken. He took part in the wars of 1866 and 1870. He received the first class of the Iron Cross for his services, a distinction which was conferred on only six or seven medical men. After the war he was made Surgeon-General of the army medical staff and the high military rank of General-Major was granted him. Several times he was Dean of the Faculty and Rector of the University. He was one of the founders of the German Surgical Association, and for many years one of the presidents of the Berlin Medical Society. He attended the meetings very punctually and regularly, but seldom took part in the discussions. Especially he seemed to dislike polemical debates, and it was an interesting sight to see the dignified and venerable old man looking down with Olympian tranquillity and a sarcastic smile on some dispute for priority. The sorrow at his unexpected death is deep and general in Berlin.

DEATHS OF EMINENT FOREIGN MEDICAL MEN.—The deaths of the following eminent foreign medical men are announced:—Dr. Geo. K. Smith, formerly Assistant Professor of Surgery in Long Island College Hospital, Brooklyn.—Dr. Rand, a well-known surgeon, also of Brooklyn, New York.—Dr. A. Tebaldi, Professor of Clinical Psychiatrics in the University of Padua.—Dr. J. Vamvas, Professor of Hygiene in the University of Athens.

Medical News.

DURHAM UNIVERSITY.—At a convocation held at Durham on Saturday, Sept. 28th, the following degrees in Medicine and Surgery were conferred by the warden, Dean Kitchin:—

M.D. (ad eundem).—W. Ewart, Caius College, Cambridge.
M.D. (Practitioners).—B. Duke, E. Duke, R. Hartley, G. H. Hetherington, J. R. Richards, H. A. Smith, W. Sykes, W. F. Thomas, W. P. Turner, and J. F. Woods.
M.D.—J. H. Baker, J. Braithwaite, T. Beattie, W. A. Dow, J. W. H. Eyre, W. E. Harker, R. L. Meade King, G. Metcalfe, F. B. Rutter, F. Syrett, and L. C. Thorne Thorne.
M.B.—O. Bevan, W. Turnbull, N. C. Gwynn, J. G. Grace, L. G. Fraser, H. L. Hatch, J. R. Adamson, A. Baker, S. Barker, W. T. Carpenter, H. Crichton, R. C. de Lacey, W. G. Fell, L. Fothergill, H. H. Gourleck, G. W. Harbottle, A. H. Hobbs, J. T. Manford, C. M. O'Brien, J. H. Rowell, F. R. Sutton, C. Stewart, F. L. Walker, and W. J. Rowland.
B.S.—J. R. Adamson, A. Baker, S. Barker, O. Beven, H. Crichton, R. C. de Lacey, L. G. Fraser, W. G. Fell, N. C. Gwynn, G. W. Harbottle, H. L. Hatch, A. H. Hobbs, E. R. Kendall, J. T. Manford, C. Menden, W. H. Rowell, F. R. Sutton, C. Stewart, W. Turnbull, F. S. Walker, and J. J. Grace.
B. Hy.—R. Green.

FOREIGN UNIVERSITY INTELLIGENCE.—*Breslau:* Dr. A. Barth of Marburg has been appointed Extraordinary Professor of Otology, Rhinology, and Laryngology.—*Budapest:* The chair of Pathological Anatomy has been divided between Drs. Pertik and Genersich. Drs. Feuer, Szili, and St. Csapodi have been promoted to Extraordinary Professorships of Ophthalmology.—*Cracow:* Drs. H. Jordan and Anton Mars have been promoted to Ordinary Professorships of Midwifery and Gynæcology.—*Göttingen:* Dr. A. Cramer has been recognised as *privat-docent* in Psychiatrics.—*Gratz:* Drs. Ebner and Bleichsteiner have been granted the honorary title of Extraordinary Professor.—*Innsbrück:* Dr. F. Dimmer of Vienna has been appointed to the chair of Ophthalmology in succession to Dr. Czermak. Dr. A. Beck of Cracow has been appointed Extraordinary Professor of Physiology.—*Marburg:* Dr. T. Axenfeld has been recognised as *privat-docent* in Ophthalmology.—*Prague* (German University): Dr. J. V. Rohon has been appointed Extraordinary Professor of Histology.—*Vienna:* Drs. A. Klein, T. Mannaberg, and F. Obermayer have been recognised as *privat-docenten* in Internal Medicine, and Dr. R. Braun von Fernwald as *privat-docent* in Midwifery and Gynæcology.—*Würzburg:* Dr. Riese has been recognised as *privat-docent* in Surgery.

FOOTBALL CASUALTY.—On Saturday last, while playing a match at Cardiff between the Cardiff and Barnstaple teams, the Cardiff International half-back sustained a fracture of his jaw.

MEDICAL MAGISTRATE.—Mr. John C. Baird, M.B., Ch.B. Melb., of Healesville, Victoria, has been made a Justice of the Peace for Victoria, Australia.

ST. THOMAS'S HOSPITAL MEDICAL SCHOOL.—The First Entrance Scholarship in Natural Science, of the value of £150, has been awarded to Mr. Frank B. Skerrett; the second, of the value of £60, being divided between Messrs. Walter B. Fry, George W. Hare, and Alfred B. Lindsey, bracketed equal. The Entrance Scholarship, value £50, for students from the Universities, has been awarded to Mr. Percy W. G. Sargent, B.A., of St. John's College, Cambridge.

WE regret to learn that Mr. A. S. Ivens, medical officer of health of Walton-on-Naze, has been seriously indisposed and compelled to leave home for the sake of rest and change. The urban district council, on Sept. 26th, elected Mr. W. E. Dawson, of Walton-on-Naze, to be acting medical officer of health during Mr. Ivens's absence. Mr. Dawson, who is a member of the district council, in acknowledging the appointment, said that he was willing to undertake the duty without emolument as an act of friendship to Mr. Ivens.

NORTH-WESTERN POOR-LAW CONFERENCE.—At the twenty-first annual meeting of the North-Western Poor-law Conference opened at Ulverston, Lancashire, on Sept. 27th, under the presidency of Sir John Hibbert, papers were read by Mr. Moore (Burnley) on Sanitation in Relation to Poor-law Administration, and by Dr. J. Milson Rhodes of Chorlton, Manchester, on Classification of Paupers by Workhouses. Dr. Rhodes said that at the passing of the Act in 1834 small administrative areas were created in order that the friends of inmates might visit the workhouses without difficulty or expense, but that by reason of the modern facilities for travelling many of the advantages of larger areas were now attainable by voluntary combinations among the existing areas. The benefits of large administrative areas were apparent to the early Poor-law reformers, and Mr. Day, an assistant commissioner, half a century ago strongly advocated the classification of paupers in a combined system of workhouses rather than in the separate wards of a single building, for in the latter case there is no guarantee for the permanence of the system, and classification soon drifts into non-classification. Enlargement of the present Poor-law areas would entail serious difficulties, and in many cases the amalgamation of two or even three unions would fail to yield satisfactory results; but voluntary combination (not amalgamation) of boards of guardians for the purpose of dealing with certain classes of paupers is an easy resource, the practicability of which has been proved by various metropolitan establishments for pauper children and for imbeciles, and by the arrangements for tramps and test cases at Liverpool and West Derby. In this way, also, satisfactory provision could be made for the sick by the employment of an adequate staff of trained nurses, whereas, under the existing system, in some of the smaller workhouses there is only one nurse, in others there is no nurse, and only last year Dr. Rhodes visited a workhouse where the method of classification was so faulty that male lunatics were placed in the male venereal wards. Recognising the advantages of large administrative areas, the Garstang, Preston, and Fylde district councils have just resolved on a scheme, not of amalgamation, but of combination, for the purpose of providing hospital accommodation for the infectious cases, especially small-pox, arising in a tract of country twenty miles square. For the accommodation of idiot children combination should be on a much larger scale, preferably by the conjoint action of Lancashire and Yorkshire. In the workhouses of the county palatine there are 2296 lunatics and probably about 600 sane epileptics, but these two classes ought to be kept apart, many of the latter being able to work, though unable to find employment on account of their infirmity. Vagrancy has not been in the least diminished by the system of two days' detention, and is not likely to be reduced except by the progress of education or by some modification of the colony system, for which some of the country workhouses, situated where land is cheap, might be made available by means of combination. After a discussion the principle advocated by Dr. Rhodes was recommended for the consideration of boards of guardians, especially with reference to imbeciles and epileptics.—On Sept. 28th Mrs. Pankhurst (Chorlton) read a paper on the Duties of Boards of Guardians in Times of Exceptional Distress. Sir Walter Foster, M.P., and the President joined in the subsequent discussion and the proceedings terminated.

UNIVERSITY COLLEGE, LONDON: SESSION 1895-96.—Medical Entrance Exhibitions; 131 guineas, Thomas C. Savage; 55 guineas, H. W. Reynolds; 55 guineas, William Reith Scroggie.

LITERARY INTELLIGENCE.—The Roxburghe Press is about to issue the *Nursing World and Hospital Record*, a journal for trained nurses, who, it is calculated, number nearly 30,000 in this country alone. The *Nursing World* is a development and entire re-organisation of the journal known for the last five years as the *Popular Medical Monthly*, and will be conducted in a broad spirit and without being the organ of a section or clique. It will contain many new and interesting features and a number of articles from the pens of well-known and competent writers. Its price will be one penny.

VOLUNTEER AMBULANCE SCHOOL OF INSTRUCTION.—The winter work of this school commenced on Monday last at the headquarters of the London Rifle Brigade, Bunhill-row, E.C., when two large companies paraded for instruction under Surgeon-Major H. F. Stokes, senior medical officer instructor. The present classes will conclude with the official inspection on Dec. 9th. It is notified for general information that no more men can be taken in either class after Oct. 7th. Among the officers who have recently joined for a course of instruction are Surgeon-Major T. F. Fleetwood, F.R.C.S., Victorian Military Forces, South Australia, and Surgeon Captain J. H. Cox, Cape Town Volunteer Medical Staff Corps.

WE are sorry to announce that Mr. Trimmer, the Secretary of the Royal College of Surgeons, was knocked down and hurt as he was leaving the College on Wednesday evening. A thief made a snatch at his chain and succeeded in getting off with it and with a bunch of seals which were attached. Mr. Trimmer endeavoured to follow the thief, but was at once thrown on his head by a confederate. His face was badly cut, but he managed to reach the College; he was at once taken to King's College Hospital, where his injuries were carefully attended to. Mr. Trimmer was able to return to his home later in the evening, and on inquiry at the College we are pleased to hear that he is not seriously injured.

GUY'S HOSPITAL ENTRANCE SCHOLARSHIPS.—An Entrance Scholarship in Arts of the value of £100 was awarded to Mr. G. Lewin, who was educated at the City of London School; and the Second Entrance Scholarship in Arts of the value of £50 was awarded to Mr. F. G. Gibson, who was educated at Canterbury College, New Zealand. Certificates of Honour were obtained by the following:—Mr. M. Feldman, Jews' College; Mr. F. S. S. George, Dulwich College; Mr. H. F. Hatfield, Dulwich College; Mr. H. D. Kempthorne, St. John's Foundation School, Leatherhead. The Entrance Scholarship in Arts of the value of £30 for dental students was awarded to Mr. H. A. G. Butler, Douglas School, Cheltenham. The Entrance Scholarship in Science of the value of £150 was awarded to Mr. P. W. L. Camps, and the Second Entrance Scholarship in Science of the value of £60 was awarded to Mr. S. Hodgson. Certificates were awarded to Mr. E. A. Miller and Mr. D. Forsyth.

DIPHTHERIA IN LONDON.—The satisfaction which was felt at the diminished number of deaths from diphtheria in London in the third week of September has been more than counterbalanced by the excessive number chronicled last week. The totals of registered deaths in the first three weeks of last month were 38, 55, and 37 respectively, the latter being even below the corrected decennial average for the particular week; but last week they rose to 56, being 12 in excess of the average, and the highest figure since the week ended Aug. 3rd, when the deaths were one more. Of the 56 deaths, 7 are credited to Camberwell, 5 each to St. Pancras, Islington, Bethnal-green, and Lambeth sanitary area. They all occurred in persons under twenty years of age, 37 being in children under five years of age. But high as were the deaths from this disease in London proper, there were in addition 17 deaths registered in the outer ring of the metropolis, as many as 11 of these being located in the West Ham, and other 4 in the Edmonton registration districts. The attacks in London were also very numerous last week, and the admissions to hospital identical with those of the preceding week—namely, 114. The cases remaining under treatment in hospitals on Saturday last numbered 673, a total which has not been equalled since Aug. 10th, when it stood at 689. The problem of diphtheria in our towns is evidently becoming more complex.

PRESENTATION TO SIR PETER EADE, M.D. Lond.—On Sept. 25th the corporation of Norwich presented the Mayor, Sir Peter Eade, with the honorary freedom of the city in recognition of the eminent services which he has rendered to Norwich. The Deputy Mayor, who presided, said that the Mayor was now holding office for the third time, the previous occasions having been in 1883–84 and 1893–94, and that he has zealously maintained the dignity of his civic position, a task in which he has been ably supported by Lady Eade. In admitting him to the freedom of the city his fellow citizens have bestowed on him the highest honour at their disposal, and a distinction reserved for exceptional cases. A handsome and elaborate silver casket containing a richly illuminated scroll was then handed to the Mayor, who signed the roll and made the customary declaration. Sir Peter Eade, after warmly thanking the corporation for the honour which they had done him, said that he was not one of those who thought that a professional man should keep aloof from any duties lying outside his special province. On the contrary, he considered that it was beneficial, even from a professional point of view, to engage in pursuits which ensured a diversity of mental occupation. He reminded the company that in Norwich very few medical men had been mayors, though some had been sheriffs. In the last hundred years, excluding himself, there had been only three medical mayors—namely, Dr. Rigby, Mr. J. Goodwin Johnson, and Mr. Nichols. In the evening another ceremony took place in the picture gallery of the Castle Museum, where Lord Walsingham, in the presence of a large and distinguished company, presented Sir Peter Eade with his portrait.

BOOKS ETC. RECEIVED.

ALLENSON, H. R., Paternoster-row, London.
Fred. C. Roberts of Tientsin; for Christ and China. By Mrs. Bryson. With an introduction by the Rev. F. B. Meyer, B.A. 1895. pp. 222. Price 3s. 6d.

BENEDICT, A. J., AND CO., Fulham-road, South Kensington, S.W.
Physicians' Monthly, Quarterly, and Yearly Register.

BLACK, A. & C., London.
Plea for a Simpler Life. By G. S. Keith, M.D., F.R.C.P.E. 1895. pp. 149. Price 3s. 6d.

BLAKISTON, P., SON AND CO., Walnut-street, Philadelphia.
Examination of Water for Sanitary and Technical Purposes. By Henry Leffmann, A.M., M.D., Ph.D. Third edition. Illustrated. 1895. pp. 154.

CHURCHILL, J. & A., New Burlington-street, London, W.
Clinical Lectures on Diseases of the Nervous System. By W. R. Gowers, M.D., F.R.S. 1895. pp. 279.
Elements of Human Physiology. By E. H. Starling, M.D. Lond., M.R.C.P. Second Edition. 1895. pp. 454.
A Manual of the Practice of Medicine. By Frederick Taylor, M.D., F.R.C.P. Fourth Edition. 1895. pp. 968.

OCKS, ROBT., AND CO., New Burlington-street, London, W.
The Human Voice. Its Mechanism and Phenomena. By Anatole Piltau. No. 9. Price 5s., net.

EWIS, H. K., Gower-street, London, W.C.
Elements of Practical Medicine. By A. H. Carter, M.D. Lond. Seventh Edition. 1895. pp. 552. Price 10s.
Dental Materia Medica and Therapeutics. By James Stocken, L.D.S. Eng. Fourth Edition. Revised by Leslie M. Stocken, L.R.C.P., M.R.C.S., L.D.S., and J. O. Butcher, L.D.S. Eng. 1895. pp. 155. Price 4s.

LIPPINCOTT, J. B., Co., Henrietta-street, Covent-garden, London.
Elements of Modern Chemistry. By Charles A. Wurtz. Fifth American edition. Revised by W. H. Greene, M.D., and H. F. Keller, Ph.D. (Strasburg). Illustrated. 1895. pp. 808.

LONGMANS, GREEN, AND CO., London.
Pioneer Work in Opening the Medical Profession to Women. By Dr. Elizabeth Blackwell. 1895. pp. 265. Price 6s.
Climbing in the British Isles—Wales and Ireland. By W. P. Haskett Smith and H. C. Hart. Illustrated. 1895. pp. 197. Price 3s. 6d.

MACMILLAN AND CO., London.
Modern Developments of Harvey's Work: The Harveian Oration, 1894. By T. Lauder Brunton, M.D., F.R.S. 1894. Price 2s.

PENTLAND, YOUNG J., Edinburgh.
Functional and Organic Diseases of the Stomach. By Sidney Martin, M.D., F.R.S., F.R.C.P. Illustrated. 1895. pp. 505.

SIMPKIN, MARSHALL, HAMILTON, AND CO., Stationers' Hall-court, London.
Sons of the Fire: a Novel. By the author of "Lady Audley's Secret," &c. In three volumes. Vols. i., ii., and iii.

SMITH, ELDER, AND CO., Waterloo-place, London.
Dictionary of National Biography. Edited by Sidney Lee. Vol. 44. Paston—Percy. 1895.

THE ROBERT CLARKE COMPANY, Cincinnati.
Some Physiological Factors of the Neuroses of Children. By B. K. Rachford, M.D. 1895. pp. 122.

St. John Ambulance Association Official Drill Manual for the members of the St. John Ambulance Brigade (published at the head offices, St. John's Gate, Clerkenwell, London, E.C.); price 6d.—Notes, Autobiographical and otherwise; by Doctor Parish; being some of the experiences of the first ten years of his professional career (The Savoy Press, Savoy House, Strand, London); price 1s.—Studien über Malaria; von Prof. Dr. G. Baccelli in Rom; autorisirte deutsche Ausgabe (Williams and Norgate, Henrietta-street, Covent-garden, London).—Illustrated Modern Art and Literature; vol. i., No. 10 (Modern Art Publishing Company, 68, Fleet-street, London, E.C.); price 1s.—Notes from Spa Practice; by Samuel Hyde, M.D. (reprint from Medical Magazine, vol. iv., March–April, 1895).—The British Gynæcological Journal; edited by L. Napier, M.D., F.R.S. Edin.; Parts 40, 41, and 42 (J. Bale and Sons, Great Titchfield-street, London, W.) price 3s. 6d. each.—Monatsbefte für Praktische Dermatologie, unter Mitwirkung von P. Taenzer in Bremen, von P. G. Unna; Zwanzigster Band; 1895; Januar bis Juni; mit Sieben Tafeln (Leopold Voss, Hamburg und Leipzig, 1895).—Magazines, &c., for October: The Strand Magazine, The Picture Magazine, Illustrated English Magazine, Boy's Own Paper, Girl's Own Paper, Leisure Hour, Sunday at Home, Pall Mall Magazine, Westminster Review, Contemporary Review, Chapman's Magazine.

Appointments.

Successful applicants for Vacancies, Secretaries of Public Institutions, and others possessing information suitable for this column, are invited to forward it to THE LANCET *Office, directed to the Sub-Editor, not later than 9 o'clock on the Thursday morning of each week for publication in the next number.*

AITKEN, C. CRAWFORD, M.B., C.M. Edin., has been appointed Junior House Surgeon to the Cumberland Infirmary.

ASPINALL, J., M.R.C.S., has been appointed Medical Officer of Health for the Smallthorne Urban Sanitary District, vice Walker.

BEALE, P. T. B., F.R.C.S. Eng., has been appointed Demonstrator of Histology and reappointed Lecturer on Elementary Biology in King's College, London.

BRODRICK, C. C., L.R.C.P., L.R.C.S. Edin., has been appointed Medical Officer of Health for the Tavistock Rural Sanitary District.

BIERNACKI, JOHN, M.B., C.M. Glasg., L.R.C.P. Edin., &c., has been appointed Medical Superintendent of the West Ham Fever Hospital.

COLBY, J. G. E., M.B., B.Ch. Oxon., L.R.C.P. Lond., F.R.C.S., D.P.H. Camb., has been appointed Medical Officer of Health for the Malton and Norton Rural Sanitary Districts.

COLLINS, A. B., L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer for the Yapton District of the Westhampnett Union.

DOCKRAY, JOHN S., B.Sc. Lond., M.R.C.S., L.R.C.P., has been appointed House Surgeon to the Manchester Southern and Maternity Hospitals.

DOW, JAS. W., M.D., Ch.M. Toronto, has been appointed Health Officer for the Shire of Rosedale, Victoria, Australia.

EASBY, W., M.D., has been appointed Medical Officer of Health for the Peterborough Rural District Council, vice W. E. Paley, deceased.

FLETCHER, JAMES, M.B., C.M. Aberd., has been appointed Resident Physician to the Aberdeen City Hospital.

FLINT, T. B., L.R.C.P. Lond., M.R.C.S. Eng., has been appointed House Surgeon to the Clinical Hospital, Manchester.

GIDLEY, G. G., L.R.C.P. Lond., M.R.C.S., has been appointed District Medical Officer for the Tiverton Union.

HOGGAN, BERTRAM B., L.R.C.P., L.R.C.S. Edin., L.F.P.S. Glasg., has been appointed Public Vaccinator at Romsey, Victoria, Australia.

HOLTON, F. W. P., M.R.C.S., has been appointed Medical Officer for the Tenth Sanitary District of the West Ham Union.

HOPE, GEO. J. B., M.A., M.B., C.M., has been appointed Medical Officer of Health to Scarborough Rural District Council, vice Cuff, resigned.

JOHNSTON, J. W., M.D., M.S. Edin., has been appointed Medical Officer for the Workhouse and the First Sanitary District of the Fordingbridge Union.

KENDALL, B. C., L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer for the Wendron Sanitary District of the Helston Union, vice Seville, resigned.

LAWSON, T. C., M.R.C.S., has been appointed Medical Officer for the Stogursey Sanitary District of the Williton Union.

MCCORMACK, CHARLES VINCENT, L.R.C.P. Lond., M.R.C.S. Lond., has been appointed Superintendent of the Corporation Hospital, Bootle, Lancashire.

MACDONALD, D. S., M.B., Ch.M. Edin., has been appointed City Health Officer for Rockhampton, Queensland.

MCBREARTY, JAS., L.F.P.S. Glasg., has been appointed Surgeon-Captain to the Greymouth Naval Artillery Volunteers, New Zealand.

MCCAW, HUGH, M.B., Ch.M. Glasg., has been appointed Public Vaccinator for the District of East Taieri, New Zealand.

MAIN, HARRY F., M.B., Ch.B. Melb., has been appointed Medical Officer for the Kyneton Hospital, Victoria, Australia.

PEEBLES, F. M., M.B. Melb., has been appointed Honorary Medical Officer to the Bendigo Hospital, Victoria, Australia, vice MacGilliaray.

ROMER, FRANK, L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer for the No. 3 Sanitary District of the Malmesbury Union, vice A. E. Clarke, resigned.

ROSS, JOHN, M.B., Ch.M. Edin., has been appointed a Public Vaccinator for the District of Waipawa, New Zealand.

RICHARDS, WM. H., L.S.A., has been appointed District Medical Officer for the Cardiff Union.

SEYLER, C. A., has been appointed Analyst for the County of Glamorgan, vice Morgan.

SHOWMAN, LOUIS F., L.R.C.P., L.R.C.S., L.M. Edin., L.F.P.S. Glasg., has been appointed Health Officer for the Wirrimbirchip Shire, Victoria, Australia.

SKINNER, E. W., M.D., C.M. Edin., has been reappointed Medical Officer of Health to the Rye Rural District Council.

STEVENS, F. J., M.R.C.S., D.P.H., R.C.P.S. Eng., has been appointed Medical Officer of Health for the Parish of Camberwell.

TOOTH, H. H., M.D. Cantab., F.R.C.P., M. Lond., M.R.C.S., has been appointed Assistant Physician to St. Bartholomew's Hospital.

WOOLLEY, GEO. T., M.R.C.S. Eng., has been appointed Consulting Surgeon to the Maldon Hospital, Victoria, Australia.

YELF, R. E. B., M.B., C.M. Edin., has been appointed Medical Officer for the Moreton Sanitary District of the Shipston-on-Stour Union.

Vacancies.

For further information regarding each vacancy reference should be made to the advertisement (see Index).

CHESTERFIELD AND NORTH DERBYSHIRE HOSPITAL AND DISPENSARY, Chesterfield.—Junior House Surgeon and Dispenser for three years. Salary £50 per annum, with board, apartments, and laundress.

EAST LONDON HOSPITAL FOR CHILDREN AND DISPENSARY FOR WOMEN, Glamis-road, Shadwell, E.—Assistant Physician, to see out-patients.

EAST SUSSEX COUNTY COUNCIL.—Consulting Medical Officer for one year. Honorarium of 100 guineas and travelling expenses.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, Brompton.—Resident House Physicians.

HOSPITAL FOR WOMEN (the Loudon School of Gynæcology), Soho-square, W.—Clinical Assistants.

LONDON HOSPITAL, Whitechapel, E.—Medical Electrician.

MANCHESTER HOSPITAL FOR CONSUMPTION AND DISEASES OF THE THROAT AND CHEST.—Resident Medical Officer at Bowden, Cheshire. Salary £60 per annum, with board, apartments, and washing.

METROPOLITAN HOSPITAL, Kingsland-road, N.E.—Assistant Surgeon.

MILLER HOSPITAL AND ROYAL KENT DISPENSARY, Greenwich-road, S.E.—Junior Resident Medical Officer, for six months. Salary at the rate of £30 per annum, with board, attendance, and washing.

NORFOLK COUNTY ASYLUM, Thorpe, Norwich.—Junior Assistant Medical Officer, unmarried. Salary £110 per annum, with £10 annual increase to £160, with board (no liquors), lodging, and washing.

ROYAL HOSPITAL FOR DISEASES OF THE CHEST, City-road, London, E.C.—Resident Medical Officer for six months. Salary at the rate of £100 per annum, with furnished apartments and board.

SHEFFIELD ROYAL HOSPITAL.—House Physician, for one year, unmarried. Board (exclusive of wine and beer) and lodging, an an honorarium of 25 guineas. Also Junior Assistant House Surgeon, unmarried. Salary 60 guineas per annum, with board (exclusive of wine and beer) and lodging.

SOUTH DEVON AND EAST CORNWALL HOSPITAL, Plymouth.—House Surgeon. Salary £100, with board and residence.

SOUTH DEVON AND EAST CORNWALL HOSPITAL, Plymouth.—Assistant House Surgeon for six months. Board and residence provided, and an honorarium of £10.

SUSSEX COUNTY HOSPITAL, Brighton.—Fourth Resident Medical Officer. Unmarried. Salary £30 per annum, with board, washing, and residence in the hospital.

SWANSEA HOSPITAL.—House Physician, for one year. Salary £50 per annum, with board, lodging, and laundress.

THE RURAL DISTRICTS OF BUNTINGFORD, HADHAM, HERTFORD, STANSTED, AND WARE, AND THE URBAN DISTRICTS OF BISHOPS STORTFORD, HERTFORD, HODDESDON, AND WARE.—Medical Officer of Health for the above districts. Salary £600 per annum, including travelling and all other expenses. Applications to the Clerk of the Joint Committee, Council Offices, Baldock-street, Ware, Herts.

WIRRAL CHILDREN'S HOSPITAL, Woodchurch-road, Birkenhead.—Resident House Surgeon. Salary £50 per annum, with board, lodging on the premises, and washing.

Births, Marriages and Deaths.

BIRTHS.

SMELT.—On Sept. 29th, at 371, Holloway-road, N., the wife of C. A. Casterton Smelt, M.B., C.M., of a son.

THOMSON.—On Sept. 25th, at 243, Queen's-road, New Cross-gate, S.E., the wife of David Thomson, L.R.C.P. Edin., L.R.C.S. Edin., L.F.P.S. Glas., of a daughter.

WHITAKER.—On Sept. 23th, at Cove House, Sandycove, county Dublin, the wife of J. Minchin Whitaker, L.R.C.S.& P. Edin., of a son.

MARRIAGES.

ASHWELL—LYON.—On Sept. 25th, at Pontefract Parish Church, Herbert George Ashwell, M.R.C.S., &c., of Nottingham, to Elizabeth Beatrice Lyon, eldest daughter of Mr. J. G. Lyon, J.P., of Carleton Close, Pontefract.

BALLANCE—MAUNSELL.—On Sept. 25th, at All Saints', Raheny, county Dublin, H. Stanley Ballance, M.D., B.S. Lond., of 4, Royal-terrace, Weston-super-Mare, to Kathleen Isabella, daughter of John Maunsell, Esq., Edenmore, Raheny.

DEATHS.

BELLOT.—On Sept. 24th, at his residence, Moreton Lodge, Leamington, William Henry Bellot, M.D. Erlangen, F.R.C.S. Eng., aged 84.

DAVISON.—On Sept. 12th, at Holloway-road, James Campbell Davison, M.D. Brux., F.R.C.S., L.R.C.P. Edin., Belgian Distinguished Service Order, aged 55.

HEATON.—On Sept. 30th, at Hastings, Alan Baldwin Heaton, M.B., of St. James's-street, S.W., in his 27th year.

MASSY.—On Sept. 27th, at Northwood Lodge, Bournemouth, Surgeon-General Hampden Hugh Massy, C.B., aged 75.

N.B.—A fee of 5s. is charged for the insertion of Notices of Births, Marriages and Deaths.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, Oct. 3rd, 1895.

Date.	Barometer reduced to Sea Level and 32° F	Direction of Wind.	Dry Bulb	Wet Bulb	Solar Radiation in Vacuo	Maximum Temp. Shade	Min. Temp	Rainfall.	Remarks at 8.30 A.M.
Sept. 27	30·21	S.E.	68	63	109	82	62	...	Hazy
,, 28	30·26	E.	64	62	120	80	60	...	Hazy
,, 29	30·25	E.	70	65	113	77	59	...	Fine
,, 30	30·06	S.E.	59	58	104	77	57	...	Foggy
Oct. 1	29·79	S.E.	64	61	116	76	59	...	Cloudy
,, 2	29·44	N.W.	55	53	101	64	55	0·22	Cloudy
,, 3	29·52	W.	49	46	80	59	42	...	Raining

Medical Diary for the ensuing Week.

OPERATIONS.

METROPOLITAN HOSPITALS.

MONDAY.—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), St. George's (1 P.M.), St. Mark's (2 P.M.), Chelsea (2 P.M.), Samaritan (Gynæcological, by Physicians, 2 P.M.), Soho-square (2 P.M.), Royal Orthopædic (2 P.M.), City Orthopædic (4 P.M.), Gt. Northern Central (Gynæcological, 2.30 P.M.).

TUESDAY.—London (2 P.M.), St. Bartholomew's (1.30 P.M.), Guy's (1.30 P.M.), St. Thomas's (3.30 P.M.), Westminster (2 P.M.), West London (2.30 P.M.), University College (2 P.M.), St. George's (1 P.M.), St. Mary's (1.30 P.M.), St. Mark's (2.30 P.M.), Cancer (2 P.M.).

WEDNESDAY.—St. Bartholomew's (1.30 P.M.), University College (2 P.M.), Royal Free (2 P.M.), Middlesex (1.30 P.M.), Charing-cross (3 P.M.), St. Thomas's (2 P.M.), London (2 P.M.), King's College (2 P.M.), National Orthopædic (10 A.M.), St. Peter's (2 P.M.), Samaritan (2.30 P.M.), Gt. Ormond-street (9.30 A.M.), Gt. Northern Central (2.30 P.M.).

THURSDAY.—St Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), University College (2 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), London (2 P.M.), King's College (2 P.M.), Middlesex (2 P.M.), Soho-square (2 P.M.), North-West London (2 P.M.).

FRIDAY.—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), Guy's (1.30 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), King's College (2 P.M.), Cancer (2 P.M.), Chelsea (2 P.M.), Gt Northern Central (2.30 P.M.).

SATURDAY.—Royal Free (9 A.M. and 2 P.M.), Middlesex (1.30 P.M.), St. Thomas's (2 P.M.), London (2 P.M.), University College (9.15 A.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), Cancer (2 P.M.).

At the Royal Eye Hospital (2 P.M.), the Royal London Ophthalmic (10 A.M.), the Royal Westminster Ophthalmic (1.30 P.M.), and the Central London Ophthalmic Hospitals operations are performed daily.

SOCIETIES.

WEDNESDAY.—LARYNGOLOGICAL SOCIETY OF LONDON (20, Hanover-sq., W.).—5 P.M. Cases will be shewn by Dr. Leonard Roper and Mr. Charters J. Symonds. Pathological Specimens by Dr. Felix Semon and Dr. Scanes Spicer.

SOUTH-WEST LONDON MEDICAL SOCIETY (Workhouse Infirmary, St. John's Hill, New Wandsworth).—8 P.M. Dr. J. B. Neal will show several cases of interest from the Infirmary.

HUNTERIAN SOCIETY.—8.30 P.M. Address by the President (Mr. Charters J. Symonds). Mr. F. Rowland Humphreys: The Infectious Nature of Rheumatism.

THURSDAY.—BRITISH GYNÆCOLOGICAL SOCIETY.—Specimens by Dr. R. H. Hodgson (Multilocular Ovarian Tumour undergoing Fatty Degeneration) and Dr. Collins of Cardiff. Paper by Mr. Bowreman Jessett: A New Method of performing Abdominal Hysterectomy, with five successful cases.

FRIDAY.—CLINICAL SOCIETY OF LONDON.—8.30 P.M. Introductory Address by the President. Papers:—Mr. Arbuthnot Lane: Three cases of Excision of the Temporo-maxillary Articulation in Children.—Sir Dyce Duckworth: Case of Sudden Death due to Cardiac Syphiloma.—Mr. Barker: Traumatic Derangement of the Knee-joint due apparently to Fracture of the Spine of the Tibia; Exoloratory Arthrotomy.—Dr. Radcliffe Crocker: Impetigo Contagiosa Gyrata.

LECTURES, ADDRESSES, DEMONSTRATIONS, &c.

MONDAY.—LONDON POST-GRADUATE COURSE.—Royal London Ophthalmic Hospital, Moorfields, 1 P.M., Mr. W. Lang: Clinical Examination of the Eye.—London Throat Hospital, Great Portland-street, W., 8 P.M., Mr. W. R. H. Stewart: Examination of the Ear.

TUESDAY.—LONDON POST-GRADUATE COURSE.—Bethlem Hospital, 2 P.M., Dr. Percy Smith: Acute Mania.

WEDNESDAY.—NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC (Bloomsbury).—3 P.M. Lecture by Dr. Beevor.

ST. JOHN'S HOSPITAL FOR DISEASES OF THE SKIN (Leicester-square, W.C.).—5 P.M. Dr. Morgan Dockrell: Eczema.

LONDON POST-GRADUATE COURSE.—Royal London Ophthalmic Hospital, Moorfields, 8 P.M., Mr. A. Q. Silcock: Choroidal Affections, with Illustrative Cases.

WEST LONDON POST-GRADUATE COURSE (West London Hospital, W.).—5 P.M. Mr. S. Paget: Surgical Cases.

THURSDAY.—LONDON POST-GRADUATE COURSE.—Hospital for Sick Children, Gt. Ormond-st., 3.30 P.M., The Medical Registrar: Pathological Demonstration.—National Hospital for the Paralysed Bloomsbury, 2 P.M., Dr. Gowers: Clinical Lecture.—Central London Sick Asylum, Cleveland-st., W., 5.30 P.M., Mr. John Hopkins: Cases in the Wards.

FRIDAY.—LONDON POST-GRADUATE COURSE.—Bacteriological Laboratory, King's College, 3 to 5 P.M., Prof. Crookshank: The Microscope and Methods of Cultivation.

SATURDAY.—LONDON POST-GRADUATE COURSE.—Bethlem Hospital, 11 A.M., Dr. Hyslop: Hysterical and Delirious Mania.

ST. JOHN'S HOSPITAL FOR DISEASES OF THE SKIN (Leicester-sq., W.C.).—5 P.M. Dr. Morgan Dockrell: Psoriasis and Seborrhœic Dermatitis.

Notes, Short Comments, and Answers to Correspondents.

EDITORIAL NOTICE.

IT is most important that communications relating to the Editorial business of THE LANCET should be addressed *exclusively* "TO THE EDITORS," and not in any case to any gentleman who may be supposed to be connected with the Editorial staff. It is urgently necessary that attention be given to this notice.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news paragraphs should be marked and addressed "To the Sub-Editor."

Letters relating to the publication, sale, and advertising departments of THE LANCET *should be addressed "To the Manager."*

We cannot undertake to return MSS. not used.

MANAGER'S NOTICE.

"THE LANCET" AND ACCIDENT INSURANCE.

A LITHOGRAPHED CIRCULAR LETTER, emanating from an office in the Strand district, is being sent to members of the medical profession, offering to supply them with THE LANCET, in conjunction with an accident insurance policy. The Proprietors of THE LANCET are in no way connected with the scheme (of which they cannot approve), and were not aware of its inception until their attention was called to it by a reader who had received the circular.

MEDICAL MEN AND INTEREST IN COMPANIES FOR THE SALE OF MEDICAL FOOD.

MR. WM. COLEMAN persists in sending round the profession from time to time offers of debentures in his company, which is constituted for the sale of a compound of extract of meat and malt wine. Our object now is not so much to discuss the merits of this preparation, but to dissuade all medical men from becoming shareholders in a company for its sale. Such a position is inconsistent with their duty and their dignity as medical men.

MESSRS. MABIE, TODD, AND BAIRD of Cheapside have sent us one of their Swan Fountain Pens—in case, probably, we had never heard of them. But we have, and use them constantly, and would not be without them. They are a revelation to anyone who has hitherto had to put up with a steel pen.

Nemo.—We believe that almost any London hospital will receive a probationer under the circumstances mentioned.

THE PERCUTEUR IN APHONIA.

To the Editors of THE LANCET.

SIRS,—The occasional instantaneous action of the percuteur was well illustrated in a recent case. On Sept. 22nd a woman aged twenty-three years was brought by a friend to ask for a ticket to attend the throat hospital, as she had for three weeks been unable to speak above a whisper. The percuteur was applied for one minute over the thyroid cartilages, and at once she could speak in a loud voice, much to her own and her companion's astonishment. The improved condition has continued up to the present date.

I am, Sirs, yours faithfully,

Oct. 1st, 1895. RICHARD NEALE, M.D. Lond.

Mr. W. Garland Soper desires to know any references to any opinions, fact, or figures with respect to the desirability or otherwise of muzzling dogs. Our correspondent's attention may be directed to an annotation in our present issue.

B.—Our correspondent had better apply direct at the offices of any of the great liners—P. & O., Orient, Cunard, &c. Most of them, we believe, require candidates to serve for at least a year.

AN UNQUALIFIED PRACTITIONER AT PENARTH.

UNQUALIFIED practice is the concern of the public. Life is sacrificed to it, and coroners' inquests have to be held. A case in point has just occurred at Penarth. A child four weeks old was ill with convulsions, and the parents called in a person described in the report of the inquest as "Doctor Graves." This gentleman has no qualification. So complete is the impression he produces of being a proper medical man that one of the jurors said that he had lived in Penarth all his life and never knew till then that Graves was not a qualified medical man. The people who sent for him on this occasion thought so too. Yet the jury added to their verdict of "Death from natural causes" "that the nurse was to blame for not calling in a properly qualified man." This seems scarcely fair till the law is so amended that such deception as is practised on a community shall be much more severely punished than it is. If we are not misinformed, this individual has been already successfully prosecuted three times, twice under the Apothecaries' Act and once under the Medical Act.

House Surgeon.—The police are not bound to take cognisance of the facts reported to them, and consequently not bound to watch an alleged suicidal patient whilst in the hospital. At the same time we hold that they would act more in the interests of justice if they did so. Quite recently a case occurred in a London hospital in which, although it was clearly established that the patient had attempted to take his own life, the local police decided not to charge him, on condition that his friends undertook to take care of him. In this we maintain they were in the wrong. The surgeon in charge of the case advised that the Chief Commissioner of Police should be informed of the fact, thus freeing the hospital from any further responsibility.

Gadus (?).—Supposing the relations between A. and C. to be of the normal friendly character which obtains between medical neighbours, the work done by C. should be considered as done by A. and for A., leaving to A. the fees for it and the collection of them.

M.B., C.M.—None but *legally* qualified medical practitioners can give certificates of the cause of death.

AN ALLEGED FLAGRANT BREACH OF ETIQUETTE.

To the Editors of THE LANCET.

SIRS,—I shall be glad of your opinion upon the conduct of a practitioner under the following circumstances. I saw a patient, employed in the Post Office, suffering from rheumatic fever and gave him a certificate to that effect. Some days afterwards a medical man employed by the Post Office was sent down to see the case. Without calling upon me at all he visited my patient and told him he was suffering from *rheumatism*, but not *rheumatic fever*. Will you kindly say: 1. Whether it is correct for a medical man to call upon another's patient without consulting him? 2. Whether it is correct for a medical man in any case, and especially under the above circumstances, to contradict another's diagnosis to the patient in the absence of the other practitioner, even though he deem the diagnosis a mistake? 3. What can be the difference between acute rheumatism and rheumatic fever (there is no doubt whatever about the acuteness of the disease—temperature 104°, &c.)? 4. After the lapse of a week, is the diagnosis of a casual visitor more likely to be correct than that of the regular medical attendant, who has seen the case from the commencement?

I am, Sirs, yours faithfully,

Sept. 24th, 1895. W. J. R.

*** 1. It is not right or usual for a medical man, whatever his official position, to visit another's patient without consulting him.—2. It is especially wrong to contradict the diagnosis of another practitioner in his absence and without giving him the chance of justifying it.—3. Acute rheumatism and rheumatic fever are synonymous terms, and rheumatism with a temperature of 104° F. is properly certified as rheumatic fever. We would venture to suggest that our correspondent may have been misinformed to some extent. He should see the medical officer of the Post Office, of whom he seems to have just right to complain.—ED. L.

H. B.—It is not necessary in all cases to have a post-mortem examination. If the medical man does not feel justified in giving an opinion as to the cause of death, of course he is not bound to do so. The entire responsibility rests with the coroner.

Dr. Edwin A. Starling is thanked for his courteous letter. We fear, however, that we shall not be able to carry out his suggestion.

HOMES FOR CHRONIC MELANCHOLIACS.

To the Editors of THE LANCET.

SIRS,—I should be exceedingly obliged if any reader of THE LANCET could tell me of an institution where a lady suffering from chronic melancholia could be admitted on the payment of not more than £40 per annum.

I am, Sirs, yours faithfully,

Sept. 28th, 1895. G. P.

"PRACTICE IN SOUTH AFRICA."

To the Editors of THE LANCET.

SIRS,—Recent residence and practice in South Africa qualifies me to answer "Scot's" queries contained in THE LANCET of Sept. 21st. South African medical practice may be divided into three classes: (1) in towns; (2) in country villages; and (3) in native districts.

In towns.—I can confidently say that every town is adequately supplied with able medical men, and that in Cape Town and Johannesburg at least the supply largely exceeds the demand. Vacancies arising are filled up by practitioners from the country, as a rule. Fees are certainly higher than at home, but living is proportionately dearer. I would strongly dissuade any stranger from attempting to start practice in a South African town unless prepared to struggle and wait as he would at home.

In country villages.—The bulk of the profession is engaged in this kind of practice, which still is very profitable in certain parts. The villages vary from merely half-a-dozen tin shanties (forming a centre for a scattered farming population) to places of 3000 to 5000 inhabitants. Living is decidedly poor, and the accommodation, society, and practice in places are decidedly rough. In Cape Colony there are few places unsupplied with medical men; but in the Orange Free State and Transvaal there are still hamlets and districts where practice and a handsome income are to be had by simply setting up. South African country people, particularly the Boers, welcome a new medical man in a way that astonishes one accustomed to the difficulties of European practice. The old-established "district surgeon" frequently sees a goodly slice of his practice taken off by the arrival of a young practitioner, "fresh from Europe with all the latest treatments," and a such-like flourish of trumpets. Fees are high in these places, especially for medicine, and country journeys are paid for at the rate of £1 an hour. Living, on the whole, costs about the same as at home; but luxuries are very dear, and much that is regarded as a necessity at home becomes a luxury in South Africa. It must be remembered that the Boers are accustomed to receiving quite twelve months' credit from their medical men; but they are good, although slow, payers. I can again confidently state that a steady practitioner, who does not mind a roughish and isolated life, will easily find a living, and in certain districts a really handsome income, from one of these rural practices. It must be remembered also that the unwritten Cape language—a mere *patois*—must be mastered during the first few months, and, further, that South Africa sends home a yearly increasing number of able students, who, when qualified, have naturally better chances in the country than a foreigner—English, Scotch, or other.

In native districts.—These are carried on under Government appointments, and are, I believe, not profitable or enjoyable, except for those desiring sport, to study the natives, or botany, zoology, &c. There is not such keen competition for these appointments as for those in more civilised districts. The future of Mashonaland and Matabeleland is still so doubtful (despite the accounts of Stock Exchange speculators), and the cost of getting there so great, that it would be unwise of any man to go there, unless to one of the district surgeoncies—obtained, like everything else in South Africa, through influence.

Cape Colony demands a fee of £5 for registration, and an annual £5 licence to dispense; the Orange Free State requires £20 a year for licence to practise, and the Transvaal more, I believe. It is cheaper and better to take out a good supply of drugs with one, and subsequently to import direct. Indiarubber goods do not last long on the inland plains up country. It is necessary to be provided with a few letters of introduction and enough capital to live and travel until an opening is found and the practice becomes productive. For many reasons it is very indiscreet to purchase a South African practice either through a London agent or in the country; as a rule, it is money thrown away. There is a South African medical journal published monthly in Cape Town. The *Cape Argus* weekly edition (London Office: 164, Fenchurch-street) often contains advertisements of openings and practices or medical men wanted. The profession is well protected against quackery, &c., in the Colony and Free State, but not in the Transvaal; and I may say, in conclusion, that the same qualifications lead to success in a colony as in the old country, only perhaps a little colonial "bounce" is required in addition, and is acquired as quickly as the language.

I am, Sirs, your obedient servant,

Sept. 28th, 1895. M.D.

APPOINTMENT OF HOUSE SURGEON TO THE NORTH CAMBS. HOSPITAL, WISBECH.

To the Editors of THE LANCET.

SIRS,—We were informed by letter that we were *the three* selected candidates for the above appointment out of eighteen applicants, and invited to attend the committee meeting on Oct. 1st. We naturally thought one of us would be elected. But no; for, curiously enough, after being detained about an hour and a half we were informed that a gentleman whom to our knowledge we never saw was elected. We were consoled for our disappointment by being informed by an elderly gentleman that we were too young for the post. Our ages, respectively, were thirty-nine, thirty-five, and thirty-one years. We should like to know at what age a man—having held hospital posts, as we all had—becomes capable of carrying out the duties of house surgeon to an institution containing twenty-four beds. It seems to us very unfair to make a selection of the candidates and then to appoint a gentleman who to our knowledge was not selected at all.—We enclose our cards and beg to remain,

Yours truly,

Oct. 2nd, 1895. J. S. B., D. S., AND E. B.

"THE CORPORATION DOCTOR."

To the Editors of THE LANCET.

SIRS,—Surely it is time that the voice of the General Medical Council was heard, and an authoritative judgment delivered in the case of the "corporation doctor." His action either is or is not distinctly unprofessional. If it is the former, then it ought not to be left to isolated practitioners to show resentment at his proceedings by refusing to meet him in consultation. If the latter, then the members of the profession who refuse to meet him simply because he is a "corporation doctor" ought to be made to understand that the position they take up is wrong. I understand that, in addition to being tabooed by the established practitioners in the district in which he settles, he is also debarred from the British Medical Association. If this is the case, surely the General Medical Council ought to nip the mischief in the bud, on whichever side it is springing up, and its action should be such as to leave no possible doubt of the light in which it means to regard the "corporation doctor" and the manner in which it means to treat him. Isolated members of the profession can do nothing. It requires a central authority to take the matter up and deal with it both quickly and strictly, or else the country practitioners will be compelled either to go to the wall or join the ranks of the "corporation doctor."

I beg to remain, Sirs, yours faithfully,

Sept. 29th, 1895. INDIGNANT.

"WANTED, SUGGESTIONS FOR TREATMENT."

To the Editors of THE LANCET.

SIRS,—In THE LANCET of Aug. 17th suggestions are asked for by "M.D." as to how to deal with a case of obstinate constipation. A measure which I have never known to fail to give relief, if persevered with sufficiently long and carried out properly, is deep kneading of the abdomen, together with movements calculated to strengthen and to give tone to the abdominal muscles. This should be carried out at least once daily, and on an empty stomach.

I am, Sirs, yours truly,

Eastbourne, Sept. 23th, 1895. O. H.

A QUERY.

To the Editors of THE LANCET.

SIRS,—I shall esteem it a great favour if you will kindly insert the following query in THE LANCET. The point in question is one of considerable interest to me. Is there any truth in the common belief that drowned bodies of men float face downwards, while those of women float face upwards? If so, what is the explanation? I can find no mention of the matter in any of the books to which I am able to refer, but am assured by numerous seafaring friends, from experience in the Hooghly and elsewhere, that the facts are as stated.

I am, Sirs, yours faithfully,

Sept. 30th, 1895. TEIGNMOUTH.

Mr. Sinclair Thompson (Bideford).—We certainly should not advise any English masseuse to start work in Constantinople, unless she were previously assured of the support of the English medical men. It must be remembered that massage is extensively practised in the East by Orientals of both sexes, and, in addition, there are in Constantinople some European masseuses. Native patients in the harems could, of course, be obtained all the year round, but European visitors can only be counted on during the spring months. For further information our correspondent should apply to the Physician to the English Embassy at Constantinople.

Mr. William Duncan.—Such advertisements are unseemly and unusual. We cannot give an opinion on their legality. Our correspondent tells us nothing of the circumstances.

COMMUNICATIONS not noticed in our present issue will receive attention in our next.

During the week marked copies of the following newspapers have been received:—*Blackburn Standard, Dundee Advertiser, Midland Free Press, Manchester Guardian, Hackney Mercury, North Middlesex Chronicle, Liverpool Courier, Montreal Herald, Birmingham Post, Cheshire Observer, Newcastle Leader, Bridge of Allan Reporter, Falkirk Herald, Leicester Advertiser, Loughborough Monitor, Carnarvon Herald, Sheffield Independent, Northern Whig, Belfast News Letter, The Sun, Builder, Times of India, Manchester Courier, Glasgow Evening News, Birmingham Argus, Redditch Indicator, Evening Telegraph (Dundee), Freeman's Journal, Pioneer Mail, Architect, Scotsman, Citizen, Brighton Gazette, Leeds Mercury, Bristol Mercury, Sanitary Record, City Press, Liverpool Daily Post, Newry Telegraph, Yorkshire Post, Evening Mail (Jersey), Mining Journal, Le Courrier de la Presse, Local Government Chronicle, Hertfordshire Mercury, West Middlesex Standard, Weekly Free Press and Aberdeen Herald, Reading Mercury, Lymington Chronicle, Eastern Daily Press (Norwich), Surrey Advertiser, Cork Daily Herald, Walton News, Guy's Hospital Gazette, Brighton Examiner, Australian Medical Gazette, Deal, Walmer, and Sandwich Mercury, Newcastle Daily Chronicle, East Essex Advertiser, Eastern Morning News, East Dorset Herald, Grantham Journal, Public Health, Sheffield Daily Telegraph, &c., &c.*

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